

Exploring How and Why Young People use Social Networking Sites

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Overarching Abstract

The first chapter of this thesis begins with a systematic review focusing on the literature exploring the relationship between the use of social networking sites (SNS) by young people and their identity development. The chapter explores psychosocial theories of identity development before suggesting the possible role SNS may play in the formation of adolescent theory of self. A difficulty identified through the process was the lack of consensus between authors about the concept of identity. This chapter draws the different descriptions together, and suggests the authors are examining different aspects of the socialisation elements of identity, in line with Hermans and Hermans-Konopka (2010) conceptualisation. The synthesis of the literature presented a confusing, and at times contradictory, picture. The papers claimed a range of findings with some authors suggesting negative associations with identify experiments online and young people's clarity of self-concept; others suggesting that SNS had a positive association with the socialisation features associated with identity formation; and some studies suggesting no relationship between the two variables. Overall, the synthesis of the literature indicated some relationship between identity and use of SNS, however the direction or causality of these relationships remains unclear.

The second chapter discusses how the mixed findings from the systematic review were interpreted to form an empirical research project. It explores why the topic area was chosen, as well as methodological and ethical considerations. A key aim of the empirical research was for the voices of young people to be represented as honestly as possible, which raised further challenges and opportunities through the process.

The final chapter presents the empirical research that was conducted. The overarching research question was to broadly examine how and why young people use SNS. Using a four phased methodological approach, young people's views were gathered at each stage, informing and refining the research questions. An online questionnaire was then developed and circulated to three mainstream secondary schools and a specialist alternative provision within the local area. The results of the questionnaire indicate that, although not explicitly mentioned by young people, identity may be an aspect of why young people use SNS.

Analysis of the data also indicates that there are gender and age differences in what SNS young people are using, and which activities they engage in online. A novel finding was identified in that 53% of young people perceive interacting using SNS as different to 'real-life'. A framework is proposed that builds on previous literature and incorporates the current study's findings, to attempt to explain the motivators and mediators which result in young people's chosen activities online. The findings are discussed in further detail, and their implications examined.

Chapter 1: Systematic Review - What is the Impact of Social Networking Site Use on Adolescent Identity Development?

Word count 5334

1.1 Abstract

This review aimed to explore whether identity development in young people is impacted upon by their use of Social Networking Sites (SNS). The databases searched were: PsycInfo, Scopus, Educational Resource Index and Abstracts and British Education Index. Tree searches were conducted from highly relevant papers. Studies were considered eligible if the participants were adolescents aged between 11 and 18 years; were conducted in any environment (e.g. home, school etc.); and where the focus was on online communication. When duplicate and review papers were removed, a total of forty papers were identified. In order to select relevant papers exclusion criteria were used. These criteria excluded specific sub-groups of young people (e.g. young people with learning difficulties or cancer survivors); papers which used problematic terminology; papers which focused upon internet use more broadly as opposed to SNS use; papers that examined specific constructs other than identity and studies without a measurable outcome variable. In total, seven papers were included in the review. The papers subscribed to different conceptualisations of 'identity' which created a challenge in relation to the synthesis of data. This is explored in more detail in the review. The data as a whole suggests that there seems to be some connection between using SNS, adolescents' identity formation or maintenance, and friendships. The research is conducted from a theory driven perspective rather than considering the views and interests of young people themselves. This calls into question the contextual validity of the research conducted in the field and offers a new avenue for further exploration.

1.2 Introduction

1.2.1 Social Networking Sites

Any website which provides the opportunity for social interaction is considered a social media site (O'Keeffe & Clarke-Pearson, 2011). The use of social media has become one of the most common activities undertaken by young people, with studies showing that a large proportion of young people spend several hours online every day (Eynon & Malmberg, 2011; Gross, 2004; Selfhout, Branje, Delsing, ter Bogt, & Meeus, 2009). Children as young as eight years old are now regularly accessing social media sites, despite most websites

stipulating a minimum age of at least thirteen years old (Childnet International, 2014). This suggests an important role for schools in ensuring that young people are navigating the internet safely (Aston & Brzyska, 2011). Much of the discourse surrounding young people's social media use is negatively related to aspects such as depression, social isolation and cyberbullying (O'Keeffe & Clarke-Pearson, 2011). This has arguably created a high level of public concern in terms of the harmful nature of social media and how best to protect young people online, that seems to be discussed in public forums almost daily (e.g. Dawson & Pinnock, 2014; Fearnow, 2014; Moss, 2014; Topping, 2014). However, although less research has been done in this area, there is also evidence to suggest that the educational and psychological benefits of using social media sites may outweigh the potential risks or dangers (Greenhow, 2011; Steinfield, Ellison, & Lampe, 2008; Tynes, 2007). Tynes (2007) argues that the use of social networking sites supports educational and psychological development of young people in areas such as critical thinking and perspective taking. There are also opportunities for young people in terms of building self-esteem, supporting relationship formation and developing feelings of affection and commitment (Valkenburg & Peter, 2011). Gross (2004) and Boyd (2014) suggest that the negative perceptions adults have of young people's use of social media is based on assumptions that lead to a fundamental misinterpretation of the context of social networking. For example, a young person sitting at a computer or constantly using their smartphone may appear socially isolated, but in fact the young person may be using the device to overcome social isolation – the 'social isolation' perspective has been constructed by adults' misconception (Boyd, 2014).

1.2.2 Identity

Erikson's psychosocial theory of development suggests that how children socialise impacts upon how they view themselves (Erikson, 1968). Erikson (1968) describes identity development as having a central role during adolescence. Ideas and feelings that individuals have about themselves are gradually perceived and amalgamate to form a perception of the individual self (Adamson & Lyxell, 1996). As illustrated by other theorists such as Marcia (1966, 1980; 1993), Berzonsky (1989, 1993; 1999), Grotevant (1986, 1993, 1997), Waterman (1984, 1992) and Côté (1996, 1997; 1987), the construct of identity has been the source of significant debate in social science literature for over fifty years (Schwartz, 2001). The root of the contention surrounds whether identity is an individual pursuit, a result of interaction with social and cultural environments, or a combination of these two explanations

(Schwartz, 2001). Erikson is one of the classic theorists in terms of identity and presents the following description of the process:

“The development of a personal meaningful, socially validated identity constitutes a primary developmental task of adolescence (Erikson, 1968, 1980)”

Davis (2012) elaborates on this and claims that Erikson’s description of identity indicates that “interpersonal relationships and social contexts play a central role in the identity formation process”

Social networking sites (SNS) represent a new social context that is regularly accessed by children and young people. In line with the description provided by Davis (2012) this new social context and how young people interact through SNS may have a role in supporting the identity development amongst adolescents in an increasingly digital world. Prensky (2001) highlights that young people represent the first generation to have grown up surrounded by, and using, a range of new technology. He goes on to suggest that this new environment and how young people interact with it, could have changed how they think about and process information (Prensky, 2001).

What the Eriksonian perspective of identity seems to miss is that interpersonal relationships and social contexts may do more than simply validate a person’s self-constructed identity. Many theorists challenging his viewpoint by arguing that no context or environment is free from the meanings that human beings attribute to them Identity, therefore, must be influenced in some way by a person’s interaction with their context and those within it (Schachter, 2005; Stigler, Shweder, & Herdt, 1990).

From a constructivist perspective, identity can be conceptualised as a self-theory (Dunkel, 2000). Hermans and Hermans-Konopka (2010) present a dialogical theory of self which stresses the importance of dialogical relationships between individuals, groups and cultures, but also within the individual. In this sense, a person’s identity is formed or developed through the interactions with others and an internal dialogue with themselves. SNS represent a forum for young people to interact in different ways and for different reasons. For example, a study by Livingstone, Bober, and Helsper (2005) found that young people actively participate in a wide range of online communities from peer to peer interaction to civic or political websites – some of which may have been more difficult for young people to participate in without the use of the internet and SNS. This could suggest that online communities present different opportunities for young people to explore different aspects of their identity (Dunkel, 2000). In this context, identity could be defined as:

“an ongoing process of negotiating and interrelating multiple I-positions in such a way that a more or less coherent and consistent sense of self is maintained throughout various participations and self-investments in one’s... life”(Akkerman & Meijer, 2011 : pg 317).

1.3 Focus of the Review

SNS use by young people is a growing area of research, but the assumptions and approach behind the research all fall into two broad groups (Best, Manktelow, & Taylor, 2014). Valkenburg and Peter (2007) describe these opposing viewpoints as subscribing to either the reduction or stimulation hypothesis. In other words that SNS use will either hinder or promote young people’s social involvement. Reviews have been conducted in the broad areas of online communication and its impact upon adolescent well-being (e.g. Allen, Ryan, Gray, McInerney, & Waters, 2014; Best et al., 2014) but as yet there is no review that considers evidence examining the relationship between SNS by young people and identity development.

The current review will therefore focus upon identity development in young people and their use of SNS by posing the question: What is the impact of SNS use on adolescent identity development?

1.4 Method

Using the method described by Petticrew and Roberts (2008) as a guide, the review was conducted in a number of stages. The specific process employed is illustrated in a diagram in Figure 1.

1.4.1 Identifying and Describing Studies: The Initial Search

In order to identify relevant papers, electronic databases were used (the search terms used are described in Figure 1). Search terms and synonyms were created using a combination of search terms employed by related reviews (Allen et al., 2014; Best et al., 2014) and the database thesauri in order to ensure descriptors were used rigorously.

The databases searched were: PsycInfo, Scopus, ERIC (Educational Resource Index and Abstracts) and BEI (British Education Index). These databases were selected in order to identify papers specifically related to the areas of psychology and education and the broader area of social sciences to reflect the nature of the review question. Additionally, tree searches were conducted from highly relevant papers: Quinn and Oldmeadow (2013) and Allen et al. (2014). All searches were conducted between 8th July and 17th October 2014.

To initially screen the studies identified through the search, the following criteria were decided upon:

- Participants: adolescents aged between 11 and 18 years. This age range reflects the definition of adolescent used in psychosocial theories of development (e.g Erikson, 1968, 1980) and the most common starting age for Secondary Education across the world of 11/12 years old (The World Bank, 2014).
- Setting: Any (school, home etc.), all countries were included. As the research area is relatively small and still developing, all settings were included in order to identify as many relevant studies as possible.
- Focus: Online communication. Many of the papers that were initially identified were focused upon other aspects of online behaviour, such as gaming or internet use more broadly. These were excluded as their primary goal of being online was not for social interaction.

This process initially identified a total of 127 studies. This number reduced to 40 when duplicate papers and review papers were excluded.

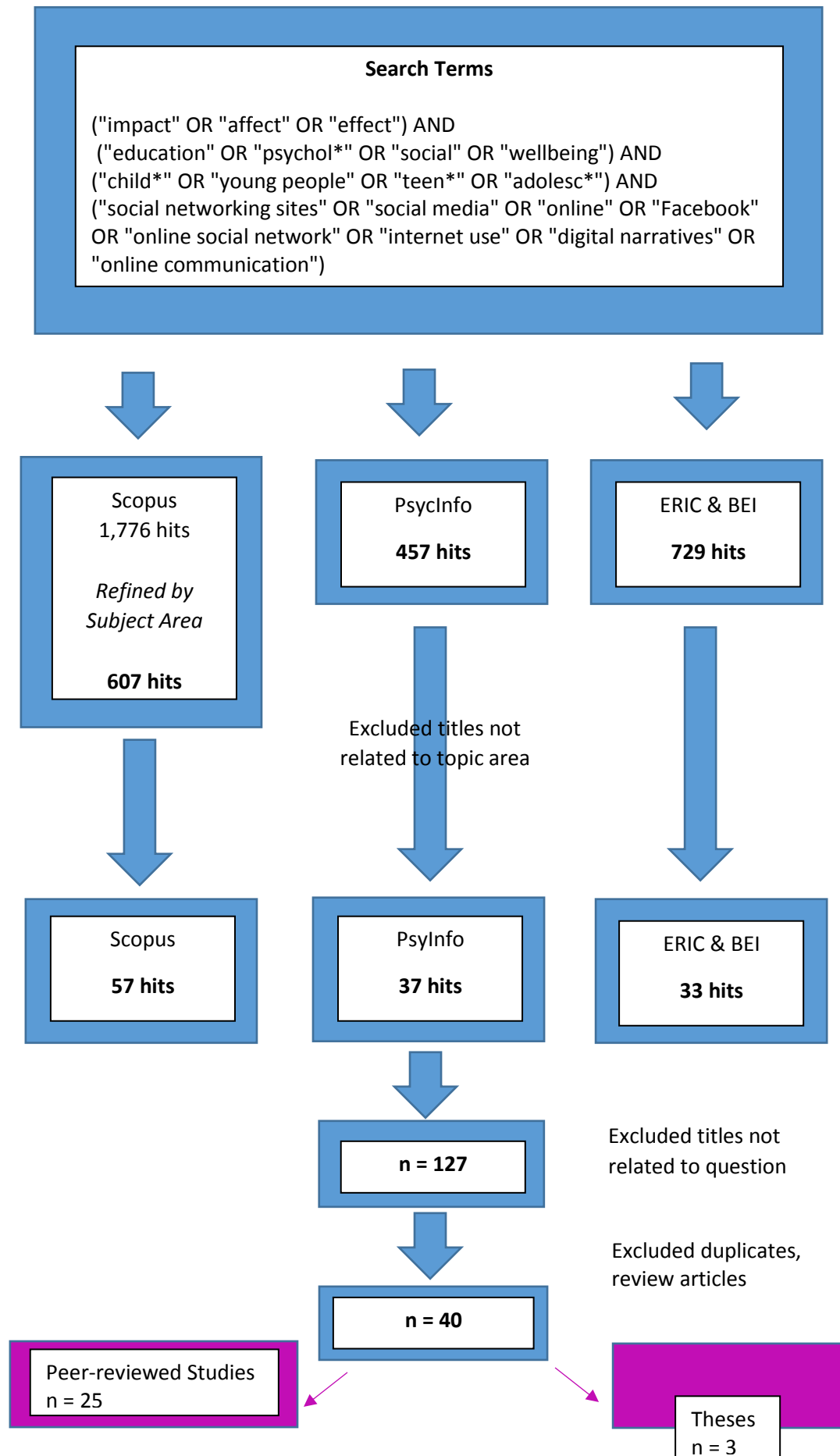
1.4.2 Identifying and Describing the Studies: The In-depth Review

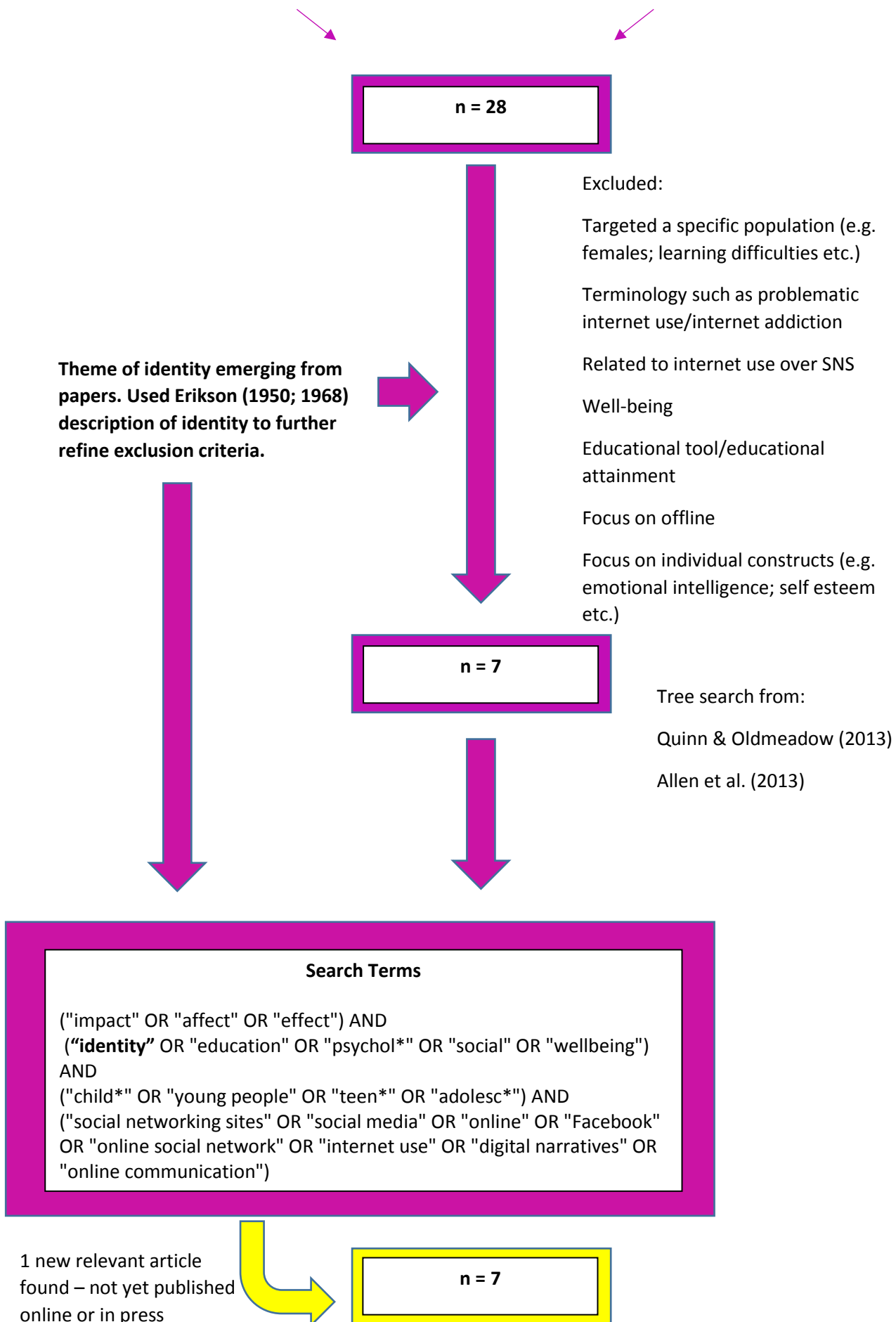
During the next stage of the search, additional criteria were employed to select relevant papers for the in-depth review. The following exclusion criteria were used:

- Participants: Studies that focused upon a specific sub-group (e.g. young people with learning difficulties, only females, or young people who had survived cancer).
- Terminology: papers that focused upon problematic outcomes such as internet addiction, as opposed to general.
- Focus: related to internet use generically, as opposed to SNS use; well-being was considered an outcome measure; educational attainment was considered an outcome measure; SNS considered as an educational tool; or the focus of the study was on offline behaviour.
- Constructs: specific constructs (other than identity) (e.g. self-esteem, emotional intelligence).
- Design: studies without a measurable outcome variable.

This process identified a total of 7 relevant studies.

Figure 1. Flow chart of the systematic review process





1.4.3 Detailed Description of the Studies in the In-depth Review

Studies that were identified through the additional level of inclusion and exclusion were summarised in terms of the type of publication, country, sample demographics, measures used, the method of analysis employed and the results (Table 1). As all of the studies identified conducted correlational, regression or descriptive analysis, effect sizes were not reported as the authors were examining whether there was a relationship as opposed to comparing a pre and post-test, or control and experimental group (as described by Thalheimer & Cook, 2002).

A critical appraisal tool was developed to analyse the scientific rigour of the studies. In order to assess the papers in this way each study was evaluated according to:

- The appropriateness of the chosen study design – this included whether a research question and hypotheses were specified and whether the analysis were appropriate in relation to the hypothesis.
- The risk of bias – this included sample size, demographics, recruitment strategy and clarity of procedure.
- Measures – this included the appropriateness of the measures for the sample, context the measures were administered in, and level of assistance provided to respondents.
- Quality of reporting – this included the authors use of literature, balance of perspectives in the literature discussed, the construct of identity was clarified, the authors use of terminology was consistent, and limitations of the study were acknowledged and explored
- Generalisability – this included reference to the sample size and demographics.

A further level of evaluation was included which assessed how well the studies answered the review question. The critical analysis tool was tabulated and the papers were colour coded in relation to each of these elements, with a description of how this decision had been arrived at (Appendix I). The judgements made then informed the weight of evidence analysis.

1.4.4 Assessing Quality of Studies and Weight of Evidence (WoE)

The studies selected for the in-depth review were then analysed using the EPPI-Centre weight of evidence tool. This tool is described as a composite assessment that takes into

account both the relevance and trustworthiness of a study (Gough, 2007). Adopting a dual level approach to analysing the quality of the papers helped ensure that decisions about the weight of evidence in each study contributed to the review question was thoroughly justified.

Table 1. Description of papers

Study	Type	Country	Sample	Measures	Analysis	Results
Cyr (2013)	Thesis	USA	N=268 (68% female) 14-18 years	Questionnaires: <ul style="list-style-type: none"> • Demographic Questionnaire • Technology Usage Scale (TUS) • The Identity Distress Survey (IDS) • Experiences in Close Relationships (ECR) • The Ego Identity Process Questionnaire (EIPQ) • Brief Symptom Inventory – 18 (BSI-18) • Peer Conflict Scale (PCS) • Existential Anxiety Questionnaire (EAQ) 	Correlation; Regression	Negative correlations between use of communication technology and identity formation and relationship quality.
Leung (2011)	Peer-reviewed Journal Article	Hong Kong	N = 718 (55.6% females) 9-19 years	Face-to-face structured questionnaire interview Subtests included: <ul style="list-style-type: none"> • Preference for online social interaction 	Regression	Loneliness and social support are associated with online identity experimentation

				<ul style="list-style-type: none"> • Online identity experimentation • Loneliness • Offline social support • Social Networking Site intensity • Demographic information 		
Quinn & Oldmeadow (2013)	Peer-reviewed Journal Article	UK	N = 443 (48.8% male) 9-13 years	Self-report questionnaire Subtests included: <ul style="list-style-type: none"> • “Belonging” measure • Social Networking Site Use • Social Networking Site usage intensity 	Regression	Higher feelings of “belonging” amongst boys who used Social Networking Sites.
Reich et al. (2012)	Peer-reviewed Journal Article	USA	N = 251 (59% female) 13-19 years (70% Latino)	Two part survey either administered online and in person Subtests included: <ul style="list-style-type: none"> • Background and online activities • Internet use • Interaction partners 	Frequency	Adolescents use Social Networking sites to address developmental needs related to intimacy and closeness to others.
Valkenburg & Peter (2007)	Peer-reviewed Journal Article	Netherlands	N = 794 (51% male) 10 – 16 years	Questionnaires (administered in 2004) Subtests included: <ul style="list-style-type: none"> • Loneliness • Social anxiety 	Frequency; Correlation; Structural Equation Modelling	Adolescents use Social Networking Sites to communicate with friends. Socially anxious adolescents use the internet less often than non-socially anxious adolescents. Socially anxious

				<ul style="list-style-type: none"> • Perceived breadth and depth of online communication • Internet communication with strangers • Closeness to friends 		adolescents perceived the internet as more effective to communicate about intimate topics than face-to-face conversations.
Valkenburg & Peter (2008)	Peer-reviewed Journal Article	Netherlands	N = 1,158 (50.1% male) 10 – 17 years	Online survey (administered in 2006) Subtests included: <ul style="list-style-type: none"> • Online identity experiments • Variety of online communication partners • Social competence • Self-concept unity • Social anxiety • Loneliness 	Frequency; Correlation; Structural Equation Modelling	Engaging in online identity experiments had an indirect positive effect on adolescents' social competence. There was no evidence that their level of self-concept unity is affected by engaging in online identity experiments. Lonely adolescents experimented more often with their identities online than did non-lonely adolescents.
Davis (2013)	Peer-reviewed Journal Article	Bermuda	N = 2,079 (57% female) 11 – 19 years	Survey Subtests included: <ul style="list-style-type: none"> • Online peer communication • Online identity expression and exploration • Self-concept clarity • Demographics 	Goodness-of-fit statistic	Positive associations between online peer communication and friendship quality. Negative associations between online identity expression/exploration and self-concept clarity.

According to the guidance given by the EPPI-Centre, each study was assigned a weight of evidence based on four criteria: the overall methodological quality of the study within its own terms (A), appropriateness of the study design for answering the specific review question (B), the relevance of the study focus to answering the specific review question (C), and an overall weight of evidence (D) based on A, B and C.

Table 2. EPPI-Centre Weight of Evidence Tool

Study	A – Internal Coherence	B – Appropriate Design/Analysis	C – Relevance	D - Overall
Cyr (2013)	Medium	Medium	Good	Medium
Leung (2011)	Good	Medium	Medium	Medium
Quinn & Oldmeadow (2013)	Good	Medium	Good	Good
Reich et al. (2012)	Medium	Good	Medium	Medium
Valkenburg & Peter (2007)	Good	Medium	Medium	Medium
Valkenburg & Peter (2008)	Good	Good/Medium	Medium	Good/Medium
Davis (2013)	Good	Good	Good	Good

1.5 Results

1.5.1 General Characteristics of the Studies Included in the In-depth Review

Table 1 describes the general characteristics of the studies included in the in-depth review. In terms of the country that the studies were conducted in, there is variation with no obvious country taking the lead in this area of research. Two studies were conducted in the USA, two within the Netherlands, one in Hong Kong, one in Bermuda and one in the UK. The differing cultures may have affected how the authors viewed the area of research and consequently the approach they took. In terms of their recruitment strategy five studies recruited through school, one through an independent research company and one used a probability sample. On the surface, recruiting through schools could be seen as an opportunity sample, however in the case of Davis (2013) all seven high schools in Bermuda were approached which resulted in 80% of all secondary school students responding and generating a much more representative sample. However, Valkenburg and Peter (2007) used an external research company to take a more random approach to recruitment. As participants had already signed up to a panel in order to take part in research, it is likely that those who took part in the study were those who were more interested in research generally, which could have affected the random nature of their approach. However this is

an issue with research more widely as those who respond are likely to be more motivated by a given topic (Robson, 2002).

The majority of the studies had a relatively even gender split, with the exception of Davis (2013) and Cyr (2013) whose samples consisted of 57% and 68% females respectively. However, the demographic split in terms of ethnicity is less clear. Reich, Subrahmanyam, and Espinoza (2012) acknowledge a significant skew towards a Latino population.

The sample size of all the studies included could be considered medium to large (Charter, 1999) but with significant variation within this - the number of participants taking part ranged from 251 to 2,079. The length of time that the measures took to complete (where reported) also varied greatly – from 10-15 minutes total administration time to the completion of eight “long questionnaires”.

1.5.2 Experimental Design of the Studies Included in the In-depth Review

Six of the studies were examining the relationship between two observable variables, with only Reich et al. (2012) reporting only descriptive statistics. Given that the area of research is still small, exploring whether relationships exist is a logical starting point. However, a significant difficulty with a correlational type of approach is that causality or directionality of findings are not clearly identifiable. This, in turn, means that it is not always apparent which variable is impacting upon the other – in this instance whether the use of online communication impacting upon the sample or the sample impacting upon online communication. Despite this, the benefit of these approaches is that they can indicate the strengths of relationships between variables that could be areas of further investigation. Of the six studies that used a correlational approach, all carried out further regression analyses on the data. This can help provide further information about the relationships explored by identifying which variables are the strongest predictor of the overall observed effect. In turn, this can provide useful information about where the most fruitful areas of future research may lie.

1.5.6 Weight of Evidence

Using the EPPI-Centre WoE tool, the overall WoE was evaluated as being ‘Good’ or ‘Medium’ across all of the papers included in the in-depth review (Table 2). The evaluations themselves varied across the three categories with four studies being considered as ‘Good’ at answering their own research questions effectively; two papers were considered ‘Good’

and one 'Good/Medium' at having a strong methodological basis for their study and three studies were rated 'Good' at answering the overarching review question. That more papers were not considered 'Good' in the relevance category is not wholly surprising. Given the research area is new and very much developing, researchers are still exploring different avenues within the larger topic and are still working to refine the various niches within it. It had been intended that ethical considerations, particularly with reference to the participants themselves, would be evaluated as part of the critical appraisal and WoE stages. However, few papers explicitly mentioned ethical considerations for the respondents, and if they did it was unclear exactly how they had addressed this. For example, Valkenburg and Peter (2007) mention ensuring appropriate privacy without explaining what this looked like. Only Reich et al. (2012) specifically mention that they gained the assent of the young people taking part. Apart from the fact that these ethical considerations raise questions about how the authors view their participants, it also raises questions about how these approaches may have affected the level of engagement or motivation of the participants to the research, and even be contesting the rights of children and young people (Coyne, 2010). Although considered in the critical appraisal stage, the intangible nature of this issue meant that is hard to factor into a WoE tool, however it has significant implications in terms of the reliability of results and therefore how much confidence a reader may have in the evidence presented by an author. For example, the opt-out approach to parental consent employed by Davis (2013) produced a very high response rate, but raises significant questions about their view of the participants involved in the study, and their parents. Although receiving the strongest WoE score using the EPPI-Centre tool, the evidence presented could be open to questions around reliability based on whether the participants had been interested in the questions posed or felt that they were obliged to respond.

1.5.7 Conceptualisation of Identity and Relationship to Methods

Cyr (2013) subscribes to an Eriksonian conceptualisation of identity where possible roles are explored and evaluated until a person commits to a given option. This would suggest that following this commitment, identity is a relatively fixed entity. In addition, this suggests that identity may be more dependent upon the individual deciding upon a given 'self'. Cyr (2013) does not go on to explore the different manifestations of identity that a young person may have. However, the methodology employed by Cyr (2013) of administering quantitative questionnaires, would fit with the idea that identity is fixed and therefore measurable.

Leung (2011) conceptualises identity as a more flexible and fluid construct reflexive evaluation of how others see us. Leung (2011) goes on to define identity as a combination of “now selves” (or how the individual currently views themselves) and “possible selves” (or the images a person has of a self that is not yet realised, but is hoped for or feared). This would suggest that identity is influenced by an individuals’ perception of others’ interpretations of them, their own interpretation of themselves, and the impact of a desired or feared future self. Accordingly, this could suggest that identity is a balance between self-perception and evaluation, and social interpretation. Similar to Cyr (2013), the conceptualisation presented by Leung (2011) does not consider whether identities can change according to different contexts. In light of the conceptualisation of identity as a process, the methodology adopted by Leung (2011) may not be consistent with the idea that identity can be measured through a structured interview.

Valkenburg and Peter (2008) explored young people experimenting with their identities online, which they define as “adolescents’ tendency to pretend to be someone else when being online”. This would seem to tie in with Leung’s (2011) conceptualisation of “possible selves”, however, the interpretation presented by Valkenburg and Peter (2008) implies an active decision to embody the personality of somebody else whereas Leung (2011) suggests an exploration of facets of themselves. This could indicate a conflicting view of the same concept. In light of this mismatch, Valkenburg and Peter (2008) present a view where identity is continually changeable dependent on context and, as such, is malleable construct. This could call into question the authors’ choice to measure this construct quantitatively.

Davis (2013) clearly describes the concept of identity as Eriksonian-like in that the definition adopted “emphasizes coherence and consistency... between that which he conceives himself to be and that which he perceives others to see him and to expect of him”. In a similar way to the definition used by Cyr (2013), this conceptualisation does not take into account the different representations of a person’s identity in different contexts and amongst different groups of people. However, adopting a survey method that reflects this relatively fixed perception of identity demonstrates internal consistency within the publication.

Those papers that discuss the views of identity adopted by authors’ do not present a consistent picture which seems in keeping with much of the literature around identity as a construct (Schwartz, 2001). The remaining papers do not conceptualise identity, but discuss

facets of it according to the Hermans and Hermans-Konopka (2010) definition. The remaining papers seem to discuss elements of the socialisation aspect of identity.

Socialisation aspects of Identity

Quinn and Oldmeadow (2013) explore “feelings of belonging” which is arguably a facet of identity (Handley, Sturdy, Fincham, & Clark, 2006). Adams and Marshall (1996) describe “feelings of belonging” as the self in context, in that sense “feelings of belonging” (pg 136) constitutes the socialisation aspect of identity. This would mean that, in contrast to Cyr (2013) and Leung (2011), Quinn and Oldmeadow (2013) have focused upon the importance of context in reference to identity. Unfortunately, Quinn and Oldmeadow (2013) do not go into much detail about what they view “feelings of belonging” to be, but choose to measure this quantitatively. This suggests they view “feelings of belonging” to be measurable. Without further exploration of the concept that they are referring to it is difficult to evaluate the appropriateness of the methodology that has been selected.

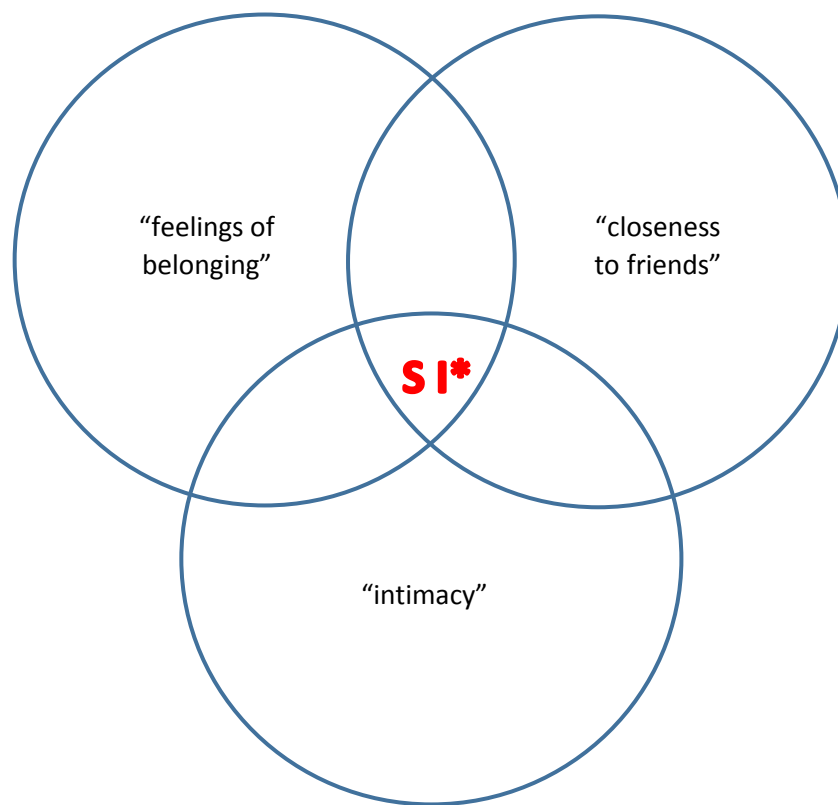
Similarly, Reich et al. (2012) do not conceptualise identity but discuss what they term “promoting and maintaining intimacy” (pg 357). Montgomery (2005) states that “interpersonal intimacy supports a sense of personal identity”. In this sense “intimacy” and “feelings of belonging” are very similar and both represent the socialisation aspect of identity. Reich et al. (2012) describe intimacy as establishing an emotional connection with others. This study required participants to respond to a questionnaire with forced response and open ended questions. The open ended questions were then quantitatively coded by theme to allow the authors to report descriptive statistics. This approach suggests that intimacy can be measured, as the authors describe intimacy as establishing an emotional connection, measuring the number of connections established would be consistent. However, measuring the emotional aspect of the connection is left unexplored by the authors. This could lead to speculation regarding whether the study examines emotional connections or merely connections.

Valkenburg and Peter (2007) discuss “closeness to friends” (pg 269) as maintaining and forming friendships, similar to Quinn and Oldmeadow (2013) and Reich et al. (2012), but Valkenburg and Peter (2007) explore “closeness to friends” as part of what they term “interpersonal identity”. This is described as a vulnerability to interpersonal influences as

young people engage in social comparison processes as part of identity formation (Valkenburg & Peter, 2007). To measure “closeness to friends” the authors used items from a parent and peer attachment inventory. This suggests that the authors view of interpersonal identity as measurable.

None of the authors of these three papers explicitly define what they mean by “feelings of belonging”, “intimacy” and “closeness to friends”. This presents a series of difficulties. On a practical level, without understanding clearly what each author is referring to by the terminology used, it becomes difficult to appraise whether the tools they have chosen are appropriate. On a conceptual level, the differing terminology makes it unclear as to whether the authors are describing similar or subtly different ideas. Subjectively, it appears as though the papers are discussing slightly different elements of the socialisation element of identity – in line with Hermans and Hermans-Konopka (2010) conceptualisation. This overlap has been illustrated in the figure below (Figure 2).

Figure 2. Venn diagram illustrating the overlap between "feelings of belonging", "closeness to friends" and "intimacy"



*SI relates to the socialisation aspects of identity

1.5.8 Data Synthesis

Seven out of forty relevant papers met the inclusion criteria for this review. The quality of the papers identified was appraised using a WoE tool and found a range of methodological strengths and weaknesses. The picture presented by the literature in the review is confusing, and at times, contradictory. Two papers report that lonely adolescents are more likely to experiment with their identity online. Two papers report negative associations between adolescents' experimenting with their identity online and their self-concept clarity, whilst another paper reports no impact of SNS use on self-concept clarity. Four papers discuss a positive link between adolescents using SNS, their social competence, friendship quality and aspects related to the socialisation features of identity. One paper found that increases in the socialisation aspects of identity were more strongly related to boys who use SNS, whilst reporting no significant change for girls. A further paper argues that using SNS fills a developmental need for young people related to the socialisation aspects of identity. A final paper reports that socially anxious adolescents feel more able to communicate with others about intimate topics via SNS.

Taking the data as a whole suggests that there seems to be some connection between using SNS, adolescents' identity formation or maintenance, and friendships. Drawing further conclusions from the data becomes problematic.

1.6 Conclusions and implications

The main outcomes across all studies were the observed strength of the relationships between the variables measured or the frequency of a given response. All of the studies indicate some relationship between identity and use of SNS, however the direction or causality of these relationships remain unclear. Broadly speaking, the review suggests that that adolescents' relationships with their friends seem to be a common theme amongst the papers. It could be suggested that how young people develop and maintain friendships using SNS is somehow linked to adolescents' identity formation. However, as a result of the difference in opinion amongst the authors on how to conceptualise identity, it is difficult to synthesise the findings and draw many meaningful conclusions. SNS use amongst adolescents is still a relatively new area of research which means that researchers are still experimenting with the best tools, methods or areas of focus to investigate. This also creates difficulties in terms of synthesis. For example, although under the umbrella term of identity, one paper may be looking at online identity experiments with another examining sense of identity. These could arguably be two separate research areas within the broad topic of identity.

The main difficulty with the evidence presented is that it approaches the subject from an adult, or 'digital immigrant', perspective (Prensky, 2001). The concept of a 'digital immigrant' is that the research is conducted by an outsider, someone who does not understand the community they are examining. This is an important idea, as for research to have contextual validity and be a true representation of these within the community, it should be designed by them – in this case 'digital natives' (Boyd, 2014; Prensky, 2001). Until research from the perspective of young people themselves is conducted, it casts doubt upon how researchers have interpreted their findings and in turn the relevance of their conclusions in reference to the community they are researching.

1.7 Implications for future research

It is my view that the findings of the systematic review raise significant questions around how research in this field has been conducted to date. The papers set out to examine the

relationship between adolescent identity and the use of SNS. However, without more understanding about how and why young people use SNS, it is difficult to interpret what the different findings within each of the papers represent. This could suggest that it may be helpful for the research field as a whole to shift its approach in terms of the research paradigm that is currently being adopted (Krauss, 2005; Mackenzie & Knipe, 2006). The highly theoretical approach that has been adopted by the researchers in the review suggest that assumptions have been made about relationships. In other words, knowledge of identity theory has led to the implication that SNS use is likely to impact identity formation. As such, currently the research field could unintentionally be subscribing to a fundamental attribution error (Harman, 1999; Sabini, Siepmann, & Stein, 2001). It seems as though the next logical step would be for researchers in the field to view the topic from an alternative perspective. Pursuing an understanding of the motivations, beliefs and outlooks of digital natives may be a helpful first step before examining outcomes and effects (Boyd, 2014; Mackenzie & Knipe, 2006; Prensky, 2001). Having this extra level of understanding would hopefully produce a more coherent narrative between researchers so that future researchers who may be interested in measuring outcomes are more confident in what phenomena they are exploring.

In this respect the systematic review has identified a dearth of research involving the voice of young people and therefore a gap in existing knowledge. This finding formed the focus of the empirical research study.

Chapter 2: Bridging Document

Word count: 3564

2.1 Aim

The document aims to tell the story behind the research, exploring why the topic became an area of interest and reflect on some of the challenges and opportunities the project presented.

2.2 Introduction

I previously worked in academic research, working mainly with families and young people. When I left this position there were many discussions around how to support and develop young people's engagement with research. One of the areas being explored was the use of social networking sites (SNS). This sparked my interest as I could see why some young people may find it easier to communicate via SNS. During my first placement as a Trainee Educational Psychologist, I became increasingly aware that young people's use of social media and SNS were a real concern for many of the adults working with them. This made me think more deeply about SNS. The perception of those around them was that young people disclosing information about themselves meant that they were more vulnerable to risks than their peers. I began to wonder whether this perception was correct. My underlying thoughts were around how "streetwise" young people are in relation to SNS - perhaps those who were disclosing too much online intended to do so in order to seek support or acknowledgement. I was interested by the reaction of the adults to these young people, and their seeming sense of panic and anxiety. I wondered how the emotional tone of the discourse could be reframed into informed discussions about the topic. It felt as though adults around young people had the perception that they were "playing catch up" with the emergence of new sites and young people's changing preferences in relation to SNS. One teacher described her frustration that once they had become aware of one SNS and felt confident in their approach to managing issues that arose, another site appeared. It struck me that what was needed was further knowledge in this area. Not necessarily about the specifics of new sites but what drew young people to them. From here it might be possible to understand the motivations for SNS. I hypothesised that if we could enhance our understanding of why young people use SNS it may become more apparent what could be viewed as typical online behaviour and what might be something more concerning. Exploring

the territory in this way could reveal whether young people's reported behaviour online, justifies the concerns of adults. As a result, the findings could give school staff more guidance in terms of if and when support might be needed; who could benefit from support and may allow them to offer intervention earlier if necessary.

From this point I decided to investigate the topic area in more detail and conducted an initial scoping review to discover what research had been conducted in the field. This review indicated that there was a small body of research which could warrant further investigation. This was done through a systematic review.

2.3 Systematic Review

A systematic review is not necessarily the way that I would have chosen to conduct a search of the literature, as I feel it is best suited to research that has a measureable outcome (such as drug trials or intervention studies). However, the process was a helpful one. By following this process it allowed me to clearly and logically make sense of the literature and be explicit about my decisions along the way. Having set out with a broad focus area, I followed the trail of the literature which led me to research into young people's SNS use and its impact upon identity development. Whilst examining the literature it became increasingly apparent that much of the research had been conducted from a theory driven perspective. I was surprised that none of the researchers had involved young people in the research process to understand the issues that were of concern to them. This is particularly notable in consideration of the United Nations Convention on the Rights of the Child which states that children and young people are entitled to have their voice heard ("Convention on the Rights of the Child," 1989).

I latched on to the idea presented by Prensky (2001) who introduced the idea of "digital native" and "digital immigrants". Prensky (2001) explains that 'digital immigrants' can adapt their skills to the new and changing skills of digital environment, but will never have the same insights, perspectives or skill sets that "digital natives" have developed from growing up in this landscape. In this sense the "digital immigrants" may have learnt the new language, but still have a distinct accent that separates them from native speakers. In many ways it seems as though previous research has been conducted by "digital immigrant" and whilst these "digital immigrants" may have a good understanding of the SNS environment, they may be coming with ways of communicating or interpreting that do not fit with "digital

natives". How then can we be sure that the research is really tackling the views and issues that are important to the young people involved? This highlighted the need to gather the views and perspectives of young people to provide the contextual rigour that seemed to be missing from the existing research in the area. This also fitted in with my epistemology. I will explore these aspects separately, beginning with my values and epistemology.

2.4 Values and Epistemology

The views and wishes of young people are at the centre of my practice and approach to research. I feel that in many instances, often in research, young people are seen as subjects within a process rather than as active collaborators (Christensen & Prout, 2002). I feel strongly that young people are often underestimated and therefore misrepresented in many contexts. This is why for me, a core value is advocating for children and young people.

I have struggled with the concept of epistemology and how that positions me as a researcher. I feel that I view the world from a critical realist perspective, but identifying the reasons why I reached this conclusion was challenging. I came across a paper that linked critical realism and "Pride and Prejudice" by Jane Austen. As this is my favourite novel, I felt that the paper might help me make sense of the concept of critical realism through a medium that I was familiar with. Hanly and Fitzpatrick Hanly (2001) use the opening line of the novel as an example of an individual's subjective view of the world "it is a truth universally acknowledged that a single man in possession of a good fortune must be in want of a wife". Elizabeth Bennett's journey through the novel exposes her to real word evidence which means that her views are challenged and reformed. In other words that a "truth" exists, but the subjectivity of individuals mean that this can be interpreted in different ways. This may mean that as practitioners and researchers it may be important to acknowledge that we may never reach the "truth", as it can be clouded by the subjective views of others.

I initially began thinking about the research topic with issues around cyberbullying or trolling online at the forefront of my mind. However, by speaking with young people in practice and through the focus groups, I realised that this was not necessarily the most important aspect of SNS use for young people themselves. This realisation shifted my thinking – I had initially approached the research from the viewpoint shared by many of the adults around the young people. Although I still consider myself a "digital immigrant", I feel that this shift in thinking helped increase my understanding of the young people's SNS community.

Aware that my perception as a “digital immigrant” is subjective and based upon my own testing and judging of evidence to form a conclusion, I felt it was important to step back a little from the research. One way to try and ensure we are getting as close to the “truth” as possible is by involving the views and perspectives of those at the centre of the research topic. Although the views of young people themselves may be subjective, any commonality between them could suggest where the “truth” may lie (Zachariadis, Scott, & Barrett, 2013). Using the commonalities of these views and “testing” them in the form of validation groups, and ultimately through the questionnaire may bring us closer to the “truth”. However, I am also aware of my role in the process. By interpreting and reforming these views to develop a questionnaire, my own subjectivity is likely to have impacted on the representation of the views gathered. As I was involved in each stage of the research, and although I allowed the young people to challenge and amend the interpretations reflected in the questionnaire, my influence cannot be completely removed from the research process.

I will now discuss in more detail how young people were involved in the process, as well as what challenges and opportunities this presented.

2.5 Participation of Young People

The literature review revealed that one area that could be linked to SNS was the concept of identity. However, in order to place young people at the forefront of the research I wanted the data to be steered by them. In this respect I put the literature to one side and adopted an approach similar to grounded theory. Strauss and Corbin (1994) explain that grounded theory is a methodology which supports the data driving and developing the outcome, rather than the assumptions or ideas suggested in literature. In this sense the approach allowed me to discover the thoughts of young people in relation to SNS without their views being restricted by existing theoretical preconceptions which may not be reflective of participants experiences (Jones & Alony, 2011).

Opportunities presented by involving young people in the research

I began the focus groups with broad research questions. One of the opportunities presented by involving young people in research in this way is that they may identify research issues and questions that otherwise might be missed or not prioritised (Kirby, 2004; Shaw, Brady, & Davey, 2011). This certainly came through in relation to the current study. The observations around how young people approached the questions in the focus groups informed the

research questions with their responses leading to questions within the questionnaire. One respondent explicitly discussed how using SNS was different to real-life which linked directly to a question in the survey and ultimately to the novel finding reported in the research. The respondents also commented on what language to use to make the questionnaire accessible to their peers and advised about length of the questionnaire and other practical considerations. A personal opportunity that presented itself to me through involving young people was to explore different research methods. For example, using different visual methods to approach the focus groups to help encourage the participation of young people of all ages, with a range of strengths and approaches to communication (Clark, Laing, Tiplady, & Woolner, 2013). I provided cards with SNS logos (including blank cards for the participants to design their own SNS logo) and newspaper headlines to support discussion. I feel that involving the young people in this way allowed me to remain conscious of their ideas and perspectives throughout the research process (Clark et al., 2013; Kirby, 2004) as well as giving me a real indication of how SNS is part of their lived experience.

By involving young people within the research design process it allowed further assurance of validity, reliability and consequently rigour of the research as at each phase of the process it was “tested” by young people (Long & Johnson, 2000).

Challenges presented by involving young people in the research

One issue that I was aware of throughout the research was that although young people were involved in the process, the idea for the research topic had come from me. In addition to this it was me who decided what to do with the information gathered and how it would be disseminated. I was aware that this could represent a power imbalance insofar that although the young people were contributing, they may not consider themselves true collaborators as they had little control of the research itself (Kirby, 2004; Shaw et al., 2011). I tried to counter this by being as open and honest with the participants as possible. In my introduction to them about why I had approached them, I explained that this was a piece of research that I was conducting as part of my training to become an Educational Psychologist. I also shared that the idea for the research had come from discussions with school staff and parents regarding their level of concern about SNS. I emphasised that I felt that they were the experts in terms of SNS and I was interested in gathering their views, as I suspected they might be different to the adults around them. I hoped that this helped the young people feel valued, respected and that they were equals in the process.

Another challenge was in relation to the consent process. To safeguard and protect young people, the legal guidelines for research stipulate that young people under the age of 16 years old must have consent to participate provided by a parent or guardian (Gill, 2004; McIntosh et al., 2000). However, as pointed out by Coyne (2010), this consent process restricts young people's ability to voluntarily participate in research. In order to respect the rights of the young people, I would not include them in my study if they had not assented to do so (by way of an assent form). Despite this, it did not get round the issue of young people who were not able to take part, as parents had not consented for their involvement. This may have inhibited interested young people from contributing to the research, and in turn affected the views and perspectives gathered through the process. This ultimately means that the adults around the children approached to take part in the research are the ones in control of young people's decisions and the research generated as a result (Powell & Smith, 2009).

A final challenge is in relation to the views expressed throughout the research process. As highlighted by Spyrou (2011), the authenticity of perspectives provided by young people involved in research may be influenced by a number of factors (such as comfort in the environment, their expectations or assumptions about what the researcher wants to hear, or their confidence in sharing their views). This is a very difficult challenge to overcome, as it is impossible to know what may be motivating a given response. To attempt to tackle this, I felt that the best approach was to ensure the environment was as comfortable as possible, for example making sure the classroom allocated was not otherwise used for disciplinary purposes. I also tried to make the approach I took to be as respectful and honest as possible. By helping the young people know that their thoughts and views would not be judged, and that I was genuinely interested in their ideas, I hoped that they would feel more at ease to openly express themselves.

Given the amount of consideration to the participation of young people, and the value given to their views, it may seem unusual to have pursued a questionnaire as a research tool. I am aware this could be perceived as viewing young people as subjects as opposed to participants within the research. In the following section I will discuss my reasoning for this decision.

2.6 Why an Online Questionnaire?

I chose to construct an online questionnaire for two main reasons. Firstly, to take a “broad brush” approach to identify areas of focus for future research in a very new and developing area. Secondly, in consideration of the topic of the research, I wanted to gather young people’s views in a way that provided some ecological validity (i.e. the participants were being asked about their use of SNS, in a way that is similar to using SNS).

Having become increasingly aware of the small and emerging research field that I was entering into, I felt it was important to take a step back and look at the attitudes of a larger population of young people. I was very aware of the old adage “if you look for something hard enough, you will find it”. What I did not want to happen was to become so focused on a small group that I had no information about the wider context their responses fell into, simply because that information did not exist yet. I felt it was important to explore whether the information provided by the participants was reflective of the views of a potentially anomalous group or indicative of the views of a larger population. I felt that a questionnaire provided a helpful tool to gather this broader contextual information. Ivankova, Creswell, and Stick (2006) suggest that adopting a mixed methods approach is advantageous as it allows the researcher to capture the overall trends as well as examine the detail of a situation. I also feel that by having examined the broader information, it could allow future researchers to use focus qualitative methods in the research field in a more informed way. This would allow researchers to uncover some more detail about what is behind the observed trends or investigate if they are reflective of SNS usage more widely than my local sample.

I also felt that it was important to provide a level of ecological validity. Schmuckler (2001) describes ecological validity as the findings being closely associated with actual behaviour outside of the research environment. I felt that by providing a questionnaire online, which discussed online behaviour, the participants may have been more likely to reflect their perceived actual online behaviour in their responses. I also assured complete anonymity in the questionnaire, which may have also helped ensure that responses were more reflective of actual behaviour (Gray, 2013).

Although the administration of the questionnaire offered many advantages, it also presented a significant ethical dilemma. I will discuss this in more detail in the following section.

2.7 Ethical Dilemma

The largest ethical dilemma in this process was in relation to distributing the questionnaire anonymously yet still being able to gain both participant and parental consent. I felt it was important that participants' complete anonymity (as provided by an online questionnaire) to be preserved, helping them feel more comfortable in providing responses (Gosling, Vazire, Srivastava, & John, 2004). However, due to the age of the participants, parental consent had to be sought (Gill, 2004). This raised a significant practical difficulty – how could parents provide informed consent without identifying the participants? Because the responses provided by the young people were completely anonymous, how would it be possible to link those who had obtained parental consent with a given response? The only way I could think of to overcome these challenges was to proceed with an 'opt-out' approach for informed consent i.e. that all parents would be provided with information about the study and if they did not want their child to take part the school would remove their name from the distribution list. This made me uncomfortable as I feel the most ethical way to recruit participants is through seeking written consent (Vellinga, Cormican, Hanahoe, Bennett, & Murphy, 2011). However, I felt my hands were tied by the practicalities of conducting the research.

As a way around this dilemma I made the young person's assent form a compulsory part of the questionnaire. As many young people declined to take part at this point, I am hopeful that this would indicate informed assent. Also, few of the questions required a response before moving on to the next. I am hopeful that this too indicates the comfort of the young people in completing the questionnaire.

2.8 Summary and Conclusions

In conclusion, I feel that I have adopted an exploratory approach to this research topic. Being able to pursue a genuine area of interest has been very enjoyable. The enthusiasm that the school staff and young people had for the topic area has been very rewarding and I am hopeful that the findings will be meaningful. When facing challenges associated with ethics and practicalities of carrying out the research, the biggest learning curve for me has been

around using methods to support the participation of young people. These ideas and approaches are definitely aspects that I will take into my future practice

Chapter 3: How and why are young people using Social Networking Sites?

Word count:5557

3.1 Abstract

How and why young people are using social networking sites (SNS) are becoming increasing concerns for parents and school staff alike. This study explores how and why young people are using SNS. The study also investigates whether there are age or gender differences when considering SNS use. A key feature of the study was that the research was built around the views and interests of young people and their advice was sought at each point of the four phase methodological process. The methodological process began with focus groups which informed both the research questions and the questionnaire itself. A draft questionnaire was then taken to a series of validation groups for further critique and comment. Following this the amended draft questionnaire was uploaded onto SurveyMonkey and piloted by two young people. The online questionnaire was then disseminated to three mainstream secondary schools and an alternative provision. Participants at all phases were selected from an opportunity sample. The study finds significant gender and age differences related to how young people use SNS. An unexpected but significant, novel finding relates to young people's perception of SNS and how closely it is associated to their offline lives. The paper presents a provisional model, drawing on social psychology and internet usage literature, aimed at understanding why young people use SNS.

3.2 Introduction

Any website which provides the opportunity for social interaction is considered a social media site (O'Keeffe & Clarke-Pearson, 2011). The use of social media is one of the most common activities undertaken by young people, with studies showing a large proportion of young people spend several hours online every day (Eynon & Malmberg, 2011; Gross, 2004; Selfhout et al., 2009). Recent research conducted by the Pew Research Centre found 24% of young people report that they are online "almost constantly", with 71% accessing more than

one social networking site (SNS) (Lenhart et al., 2015). Children as young as eight years old are now regularly accessing social media sites, despite most websites stipulating an age limit of at least thirteen years old (Childnet International, 2014). In line with the UK Government's current and upcoming statutory guidance for keeping children safe in education, this suggests an important role for schools in ensuring that young people are navigating the internet safely (Aston & Brzyska, 2011; Department for Education, 2015).

Much of the discourse surrounding young people's social media use focuses on negative effects such as depression, social isolation and cyberbullying (O'Keeffe & Clarke-Pearson, 2011). It has been claimed that this has created a moral panic about social media and how best to protect young people online, being discussed in public forums almost daily (e.g. Dawson & Pinnock, 2014; Fearnow, 2014; Moss, 2014; Topping, 2014).

Although less research has been done in this area, there is also evidence to suggest the educational and psychological benefits of using social media sites may outweigh the potential risks (Greenhow, 2011; Steinfield et al., 2008; Tynes, 2007). Tynes (2007) argues that the use of social networking sites supports aspects of educational and psychological development of young people, such as critical thinking and perspective taking. There may be further opportunities for young people in building self-esteem, supporting relationship formation and developing friendship quality (Valkenburg & Peter, 2011).

Gross (2004) and Boyd (2014) suggest the negative perceptions adults have of young people's use of social media is based on fundamental assumptions that lead to a misinterpretation of the context of social networking. For example, a young person sitting at a computer or constantly using their smartphone may appear socially isolated, but in fact the young person may be using the device to overcome social isolation – the 'social isolation' perspective has been constructed by adults' misconception (Boyd, 2014). Similarly, research has suggested that patterns of online communication reflect how young people communicate in person. For example, socially anxious young people may communicate online less often than their peers, however, some research has found that socially anxious young people valued online communication more for discussing important issues with their friends (Valkenburg & Peter, 2007). Communicating online to access social support has also been suggested as one reason for social media usage by young people (Greenhow & Burton, 2011; Leung, 2006; O'Dea & Campbell, 2010).

The creation of the UK Council for Child Internet Safety in 2010 (UKCCIS) and the subsequent advice and guidance issued demonstrates that the UK Government has increasingly focused upon young people's use of social networking sites (UKCCIS, 2010). Changes to the new Office for Standards in Education Children's Services and Skills (Ofsted) framework incorporating "Online Safety" measures have included "access to content, contact with others, and behavioural issues" (Ofsted, 2015; South West Grid for Learning Trust Ltd., 2015). These changes may increase pressure upon schools to respond to the diversity of challenges raised by young people's increasing use of SNS. To inform what kind of support might be beneficial for schools to provide, the present study had two overarching research questions:

- How do young people use SNS?
- Why do young people use SNS?

Following observed differences in the focus groups' responses, a further three research questions were identified:

- What activities do young people engage in using SNS?
- Is there a gender difference when considering SNS use?
- Is there an age difference when considering SNS use?

This paper will explore the participants' responses to try and understand this constantly evolving realm of young people's lives. Much of the previous research in this area has been driven by the views or interests of the researchers. The systematic literature review conducted for this study and further searches to date indicate no studies have involved young people to inform the development of the research in this area. In order to understand whether current research is reflective of young people's beliefs and interest on the subject, this study aimed to involve young people as fully as possible throughout the process. It is hoped this will allow the research to ensure relevance of the data collected and the results are reflective of young people's lived experience (Shaw et al., 2011).

3.3 Methods

This study has been conducted from a critical realist perspective and adopts a mixed-methods approach (McEvoy & Richards, 2006; Scott, 2007). The study was approved by the Newcastle University Ethics Committee in July 2015. The research method was subdivided into four phases, with each phase informing the following (see Figure 1).

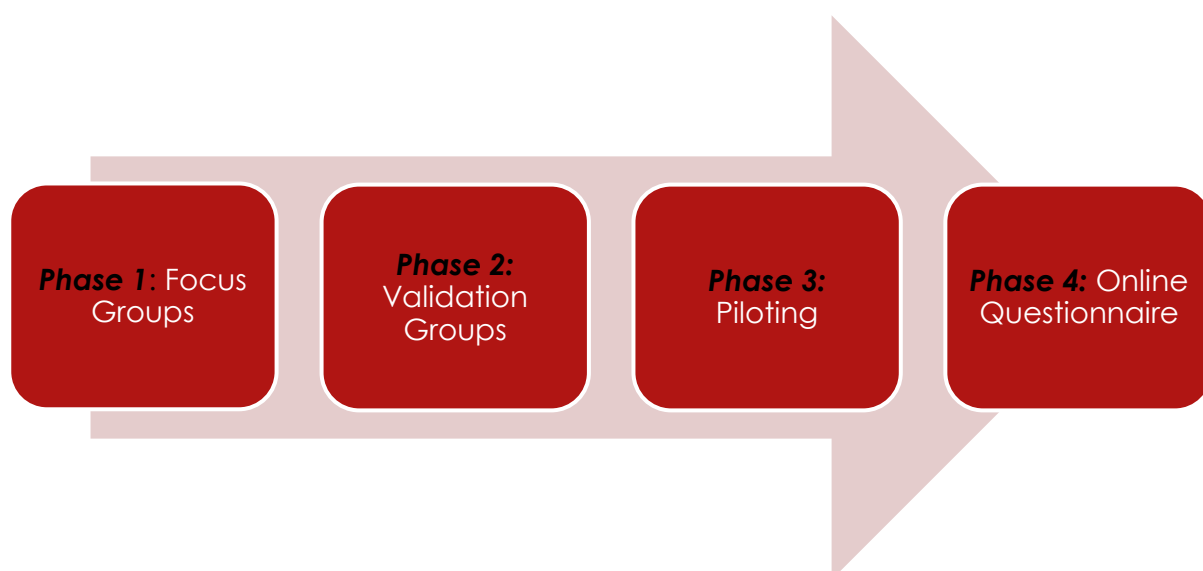


Figure 1. The four research phases

Phase 1: Focus Groups

Ethics: Consent and assent forms were circulated to students in Year 8 and above (in keeping with the recommended guidelines for joining SNS) alongside information sheets about the study (Appendix III).

Participants and Sampling: A local secondary school was approached to discuss possible involvement. Following return of completed consent and assent forms, indicating agreement for young people to be involved in the focus groups, respondents were divided into friendship groups. It was considered participants would feel comfortable discussing their social activities with those they usually socialised with. Two focus groups being run with Year 8 males ($n = 8$) and Year 9 females ($n = 4$). The focus groups met Kitzinger's (1994) definition that "focus groups are group discussions organised to explore a specific set of issues...The group is 'focused' in the sense that it involves some kind of collective activity"(pg. 103) and that group interaction is explicitly used as research data.

Methodology: Semi-structured focus groups were conducted using newspaper headlines and visual images of popular SNS logos as prompts for discussion and a few key questions from the researcher (see Appendix II). Observation of the interaction within the focus groups produced three further overarching research questions. Using a combination of audio- and note- based analysis, comments and thoughts provided by both focus groups were then used to develop a draft questionnaire (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009).

Phase 2: Validation Groups

Ethics: Consent and assent forms were circulated to young people who attended after-school clubs with information sheets about the study (n = 15-25).

Participants and Sampling: Two after-school clubs were approached, providing informal forums for young people to share and discuss issues important to them. By deciding topics for discussion and agreeing on agendas for the sessions, with the support of a youth worker, the young people themselves were very much in ownership of these clubs.

Methodology: The draft questionnaire was taken to two validation groups. The validation group participants broke into smaller groups of 2-5 young people to discuss the questionnaire. The participants wrote on the questionnaire and used post-it notes to make any amendments or suggestions they felt would be helpful (see Appendix IV). They then fed back their thoughts and comments for further discussion.

Phase 3: Piloting

The draft questionnaire was amended and entered into SurveyMonkey. This version was piloted with two young people to identify any technical errors and offer further opportunity for comment.

Phase 4: Questionnaire

Ethics: Information sheets were sent to all families of young people in Year 8 and above in four secondary schools within a Local Authority. Due to the difficulties with anonymously linking paper consent forms to electronic responses, the information sheet offered an opt-out clause. Parents who did not wish their child to complete the survey had their child's e-mail address removed from the distribution list by school staff. To ensure participants fully agreed and were informed about the study a further electronic information sheet with an assent form had to be read and agreed to before the young people could proceed with the online questionnaire.

Participants and Sampling: Three mainstream secondary schools took part in the study. Two of the mainstream schools made the link available to all students in Year 8 and over, with the third setting opting to provide a cohort of thirty students for the study. A further specialist provision for young people with social and emotional difficulties sent the link to all their students.

Methodology: The SurveyMonkey link to the online survey was disseminated by school pastoral staff to participants. All data was anonymised at the point of entry. Responses were stored in a password protected account held at The School of Education, Communication and Language Sciences at Newcastle University.

3.4 Results

3.4.1 Overall Sample

412 young people read the assent form from which 393 chose to complete the survey.

Table 3 Descriptive details of the sample

	Sample	
	%	N
Gender	48% Male	188
	52% Female	205
Year Group	24% Year 8	95
	18% Year 9	71
	38% Year 10	150
	18% Year 11	70
	2% Post-11	7

Seventy-five percent of respondents reported using SNS several times a day. 64% of young respondents reported they initially joined SNS to talk to others and 83% reported they currently use SNS to talk to others. When online, 74% reported they frequently talk to friends from school. 67% reported they know everyone on their friends lists, with 32% knowing everyone on their followers lists. Being quick and easy to get in touch was reported by 42% as what they liked best about SNS. 34% reported something online has affected them offline and 47% reported they have seen something online which has upset them or made them feel uncomfortable. 53% of young people reported talking online feels different to interacting in 'real-life'. 64% of respondents think parents and teachers should be worried about SNS.

Results were then compared by year group and gender. The Post-11 group were excluded from the year group analysis as the numbers were too small to enable meaningful comparisons.

3.4.2 What SNS do young people use?

Participants were asked which SNS they used, and how often.

Results by Gender

Males and females were relatively evenly matched in terms of their reported use of SNS (95% and 98% respectively). Females reported using SNS more frequently than males as 82% reported they used SNS several times a day, in comparison to 69% of males ($\chi^2(5, N = 393) = 14.24, p = .014$).

Table 4 SNS used – comparison by gender

Gender	Percentage (%)				
	Facebook	Twitter	Instagram	Snapchat	Tumblr
Male	92	35	55	52	11
Female	88	44	81	80	22
	n/s	n/s	$\chi^2(1, N = 379) = 31.01, p \leq .001$	$\chi^2(1, N = 379) = 34.34, p \leq .001$	$\chi^2(1, N = 379) = 8.57, p = .003$

*n/s = no significant difference observed

Results by Year Group

In Year 8, 91% of young people reported using SNS. This increased in Year 9 (97%) and continued to slowly increase in Years 10 and 11 (98% and 99% respectively) which represented a significant difference $\chi^2(3, N = 386) = 10.72, p = .013$. Frequency of use fluctuated by year group with 61% of Year 8 pupils, 80% of Year 9 pupils, 79% of Year 10 pupils and 87% of Year 11 pupils reporting using SNS several times a day ($\chi^2(15, N = 386) = 30.49, p = .010$).

Table 3 SNS used – comparison by year group

Year Group	Percentage (%)				
	Facebook	Twitter	Instagram	Snapchat	Tumblr
Year 8	73	27	66	51	11
Year 9	90	41	74	67	12
Year 10	97	42	63	69	18
Year 11	97	52	82	85	25
	$\chi^2(3, N = 370) = 37.67, p \leq .001$	$\chi^2(3, N = 370) = 10.18, p = .017$	$\chi^2(3, N = 372) = 9.68, p = .021$	$\chi^2(3, N = 372) = 20.56, p \leq .001$	n/s

3.4.3 Why do young people use SNS?

To answer this question, participants were asked about their reasons for originally joining SNS and their current SNS use.

Results by Gender

Fifty-nine percent of males and 67% of females reported first joining SNS between the ages of 10-12 years old. The most common reason for joining SNS was to talk to others (70% of males; 63% of females). When young people were asked about their current SNS use females in particular frequently recorded other reasons for SNS use (Table 4).

Table 4 Reasons for using SNS now - comparison by gender

Gender	Percentage (%)				
	To talk to others	To share photos/updates /videos	To comment on other people's photos/updates/videos	To see what other people are up to	To play games
Male	83	48	39	62	26
Female	89	63	53	67	9
	n/s	$\chi^2(1, N= 381) = 9.05, p = .003$	$\chi^2(1, N= 381) = 7.33, p = .007$	n/s	$\chi^2(1, N= 381) = 18.82, p \leq .001$

*n/s = no significant difference observed

Results by Year Group

Sixty-two percent of Year 8s, 55% of Year 9s, 63% of Year 10s and 64% of Year 11s reported first joining SNS between the ages of 10-12 years old. The most common reason for joining SNS was to talk to others (61% of Year 8s, 68% of Year 9s, 71% of Year 10s and 61% of Year 11s). The Table 5 illustrates young peoples' reasons for using SNS now.

Table 5 Reasons for using SNS now - comparison by year group

Year Group	Percentage (%)				
	To talk to others	To share photos/updates /videos	To comment on other people's photos/updates/videos	To see what other people are up to	To play games
Year 8	73	43	44	53	28
Year 9	90	62	54	71	10
Year 10	88	54	42	67	19
Year 11	93	73	52	68	7
	$\chi^2(3, N= 374) = 15.80, p = .001$	$\chi^2(3, N= 374) = 15.41, p = .001$	n/s	n/s	$\chi^2(3, N= 374) = 14.84, p = .002$

*n/s = no significant difference observed

3.4.4 Who do young people interact with using SNS?

Participants were asked who they communicated with frequently on SNS and the purpose of these communications. The participants were also asked about their experience and behaviour online.

Results by Gender

Table 6 Who young people communicate with frequently on SNS - comparison by gender

Gender	Percentage (%)					
	Friends from school	Friends from outside school	Family	People known from school (not close friends)	People known from outside school (not close friends)	People met online
Male	76	43	30	14	8	10
Female	81	47	36	8	9	11
	n/s	n/s	$\chi^2(3, N= 343) = 10.59, p = .014$	n/s	n/s	n/s

*n/s = no significant difference observed

Thirty-seven percent of males and 46% of females reported ever having spoken to someone via SNS who they met online.

The conversations that young people reported to having online were mainly chatting with friends (77% of males and 85% of females respectively) in comparison to talking about something specific, arranging to meet up, or because they were bored.

Participants were asked whether they knew everyone on their friends and followers lists. A friends list is where a user physically adds a person to their network. Followers add themselves to receive updates about a user's profile without the user's permission being sought. It is, however, possible to block unknown followers. Results by gender are in Table 7.

Table 7 Percentage of young people reporting to know everyone on their friends or followers lists - comparison by gender

Percentage (%)		
Gender	Know everyone on their friends list	Know everyone on their followers list
Male	72	38
Female	71	30
	n/s	n/s

*n/s = no significant difference observed

Females more frequently reported that what they liked best about SNS was that it was quick and easy to get in touch. Males reported they liked being able to contact others whenever they wanted ($\chi^2(5, N= 365) = 18.67, p = .002$).

A significant difference found by gender was in relation to how many reported anything online having upset them or made them feel uncomfortable (Table 8).

Table 8 Percentage of young people who reported something online had affected them offline, or had made them feel upset or uncomfortable - comparison by gender

Percentage (%)		
Gender	Anything online affected them offline	Anything online has made them feel upset or uncomfortable
Male	32	41
Female	38	57
	n/s	$\chi^2(1, N= 376) = 9.04, p = .002$

*n/s = no significant difference observed

Results by Year Group

Table 9 illustrates whom young people reported communicating with frequently. Responses compared by Year Group.

Table 9 Who young people communicate with frequently on SNS - comparison by year group

Year Group	Percentage (%)					
	Friends from school	Friends from outside school	Family	People known from school (not close friends)	People known from outside school (not close friends)	People met online
Year 8	73	35	48	10	8	9
Year 9	78	49	28	10	5	10
Year 10	84	47	32	13	12	14
Year 11	78	46	24	5	6	8
	n/s	n/s	$\chi^2(9, N= 336) = 17.50, p = .042$	n/s	n/s	n/s

*n/s = no significant difference observed

Thirty percent of Year 8s, 39% of Year 9s, 51% of Year 10s and 44% of Year 11s reported they had spoken to someone via SNS whom they had met online. The purpose of conversations via SNS varied by Year group (see Table 10).

Table 10 Purpose of conversations had on SNS - comparison by year group

Year Group	Percentage (%)			
	Just to chat	To tell, show, or ask about something in particular	Arranging when to meet up	Because of boredom
Year 8	74	39	35	40
Year 9	90	55	67	61
Year 10	78	54	60	49
Year 11	90	65	57	41
	$\chi^2(3, N= 374) = 10.98, p = .021$	$\chi^2(3, N= 374) = 11.05, p = .011$	$\chi^2(3, N= 374) = 19.83, p \leq .001$	$\chi^2(3, N= 374) = 8.17, p = .043$

The respondents were asked whether they knew everyone on their friends and followers list. Responses by Year group are in Table 11.

Table 11 Percentage of young people who reported they know everyone on their friends or followers lists - comparison by year group

Year Group	Percentage (%)	
	Know everyone on their friends list	Know everyone on their followers list
Year 8	82	42
Year 9	69	29
Year 10	69	32
Year 11	68	29
	n/s	$\chi^2(6, N= 362) = 12.82, p = .046$

*n/s = no significant difference observed

Across all year groups, respondents most frequently reported what they liked best about SNS was that it was quick and easy to get in touch.

Table 12 Percentage of young people who reported something online had affected them offline, or had made them feel upset or uncomfortable - comparison by year group

Year Group	Percentage (%)	
	Anything online affected them offline	Anything online has made them feel upset or uncomfortable
Year 8	19	26
Year 9	31	40
Year 10	44	58
Year 11	42	68
	$\chi^2(3, N= 372) = 16.17, p = .001$	$\chi^2(3, N= 370) = 34.78, p \leq .001$

3.4.5 Perception of Risk Online

Following information shared during the focus groups, participants were asked whether interacting via SNS felt the same as interacting in person. They were also asked what advice they would give to younger students and whether they felt teachers and parents should be worried by SNS.

Results by Gender

Fifty-five percent of males and 52% of females reported talking online feels different to real-life.

Participants were then asked what advice they would give primary school pupils about SNS. The participants were then asked where they had learned this advice. Table 13 details their responses.

Table 13 Where advice about SNS was acquired from - comparison by gender

Gender	Percentage (%)		
	From school	From own experience	From family
Male	31	41	28
Female	36	30	34
	n/s		

*n/s = no significant difference observed

Participants were asked if they had followed this advice themselves. Table 14 illustrates their responses.

Table 14 Participants who reported following their own advice - comparison by gender

Gender	Percentage (%)		
	Yes	A bit	No
Male	65	26	9
Female	72	24	4
n/s			

*n/s = no significant difference observed

Participants were asked whether they felt parents and teachers should be worried about SNS. Table 15 details their responses.

Table 15 Participants who feel parents and teachers should be worried about SNS - comparison by gender

Gender	Percentage (%)	
	Yes	No
Male	60	40
Female	78	22
$\chi^2(1, N= 367) = 13.84, p \leq .001$		

Results by Year Group

When asked whether talking online feels different to real-life, or the same to real-life, 46% of Year 8s, 64% of Year 9s, 53% of Year 10s and 54% of Year 11s reported talking online feels different to real-life.

Participants were asked what advice they would give primary school pupils about SNS. The participants were then asked where they had learned this advice. Table 16 details their responses.

Table 16 Where advice about SNS was acquired from - comparison by year group

Year Group	Percentage (%)		
	From school	From own experience	From family
Year 8	45	20	35
Year 9	37	25	37
Year 10	28	47	25
Year 11	29	39	32
$\chi^2(6, N= 364) = 21.34, p = .002$			

Participants were asked if they had followed this advice themselves. Table 17 details their responses.

Table 17 Participants who reported following their own advice - comparison by year group

Year Group	Percentage (%)		
	Yes	A bit	No
Year 8	84	17	0
Year 9	64	25	10
Year 10	64	27	8
Year 11	64	32	4
$\chi^2(6, N= 364) = 16.51, p = .011$			

Participants were asked whether they felt that parents and teachers should be worried about SNS. Table 18 details their responses.

Table 18 Participants who feel parents and teachers should be worried about SNS - comparison by year group

Year Group	Percentage (%)	
	Yes	No
Year 8	79	21
Year 9	55	45
Year 10	65	35
Year 11	81	19
$\chi^2(3, N= 363) = 15.45, p = .001$		

3.4.6 Open Ended Questions

Within the questionnaire the respondents were asked a series of open-ended questions. Using a “scissor-and-sort” technique, responses that revealed common words or phrases were grouped together (Stewart & Shamdasani, 2014).

The first question related to what other SNS participants used. Thirty-four percent of respondents noted YouTube as a popular SNS. Others mentioned included Whisper, Pinterest and Liveleak. Participants were also asked if there were any other reasons that they had originally joined SNS. Responses varied and included answers such as “stay in touch with family” and “to watch videos”. One respondent noted:

“basically my friends and I always used to compete with how many likes and followers we had, to be honest I felt like I had step[ped] in to a whole new world”

Respondents were also asked if there were other reasons they used SNS currently. Eighteen percent mentioned following celebrities online; 9% stated joining SNS to keep up to date with news or world events and 6% explained they use SNS because of involvement with a particular group (e.g. St John’s Ambulance).

If they felt comfortable doing so, participants who reported having experienced something upsetting online were asked to share more information about what had happened. One-hundred and nine young people chose to answer this question. Forty-nine percent reported arguments online had affected their friendships or relationships offline. Eighteen percent stated experiences of cyber-bullying or being trolled online. Other incidents included being hacked being approached by people who were not who they claimed to be and seeing upsetting videos. Examples of responses provided by young people are in Table 19.

Table 19 Examples of participants' responses to what had made them feel upset or uncomfortable whilst using SNS – grouped by theme

Theme	Response
Friendships/relationships	<p><i>"we had an argument and a lot of things kicked off resulting in me not being friends with them anymore"</i></p> <p><i>"friends getting in massive arguments over stupid thing they wouldn't say to each other's face"</i></p> <p><i>"Arguments are hard to avoid online as it's more difficult to get your points across. I have lost closeness with a lot of friends. People also on social networks aren't afraid to say what they think (even if it hurts someone), because they don't have to say it in person, so they won't feel as 'bad' about it. Some things that have been said to me in the middle of an argument still affect me even now, as I know they meant what they were saying, they were just too scared to say it to my face"</i></p>
Cyberbullying/being trolled	<p><i>"my friend was getting nasty messages"</i></p> <p><i>"my friend was bullied by a girl who she never met, she would do it every day until she blocked her"</i></p> <p><i>"people comment nasty s*** on ya photos ... or people have wrote a status about you saying loads of b*****"</i></p>
Other (including being hacked, approached by strangers and seeing upsetting videos)	<p><i>"well I had a face book account and a virus came on and hacked my account and sent rude pictures to all my friends on fb and everyone thought it was me so my mam put some statuses up and I changed my password and told all my friends it was not me"</i></p> <p><i>"a stranger added me and tried to say he loved me and asked for pictures and i said no and blocked him"</i></p> <p><i>"someone posting racist videos but it's friends that are doing it. People posting videos about somebody else getting bullied and abused by a group. Someone else getting tagged in statuses about them and they have nobody to stick up for them."</i></p>

One respondent, however, noted the positive impact of SNS stating:

“me and my friends enjoy the same band along with millions of other fans. This meant that when we tweeted about them other people saw and also joined in. This affected us in a good way because we now have some really great nice friends that we made online but now know in real-life.”

Respondents were asked what advice they would give to primary school pupils about SNS. Three hundred and sixty-eight participants responded to this question. Fifty-eight percent stated not talking to people they do not know or sharing personal details. Three percent of respondents stated their advice would be for primary school pupils to be careful what they share online. Six percent shared that their advice would be to join SNS when they are old enough.

Table 20 Examples of participants' responses to what advice about SNS they would provide to primary school pupils – grouped by theme

Theme	Response
Not talking to strangers/sharing personal details	<i>"add people you know, and try to remember the things you put on can be tracked up in later life and can effect your future in a negative way"</i>
	<i>"make sure you know who is on your friends and who your talking to don't talk to strangers also don't put all of your personal information online."</i>
	<i>"Never accept friend request from stranger and don't talk or arrange to meet strangers without a parent or guardian. don't ever share any personal information no matter if your account is private, it maybe easily hacked! Last of all be careful when you are updating your computer, do not tap on any links saying "win free Ipad" or "win iPhone 6". they can easily hack your account and invade in your privacy!"</i>
Be careful what is shared online	<i>"be careful on it and don't upload anything that u wouldn't show your grandmother"</i>
	<i>"... try to remember the things you put on can be tracked up in later life and can effect your future in a negative way"</i>
	<i>"Use it but don't comment anything stupid and don't share stupid things"</i>
Joining SNS at an appropriate age	<i>"don't join up until you're at least 13 years old"</i>
	<i>"don't do it kids, not until your 30"</i>
	<i>"dont get it until your old enough"</i>

This was shared by one respondent who summarised their views and advice regarding SNS to younger children:

"Be careful when signing up to Social Networking Sites. It's dangerous and can be scary. It's never all fun and games in the end. Nothing bad has actually happened to me yet, but if I'm not careful then something could happen to me."

Finally, participants were asked why parents and teachers should be worried about SNS.

Three hundred and nine participants responded to this question. Seventy-four percent felt

teachers and parents should be worried about not knowing who young people are talking to. Seventeen percent of respondents felt parents and teachers should not be worried about SNS and should trust young people online. Other respondents suggested they felt parents and teachers should not be worried by SNS, but should be available for help and support if needed.

Table 21 Examples of participants' responses to why parents and teachers should/should not be worried by SNS – grouped by theme

Theme	Response
Not knowing who young people are talking to/danger	<i>"it sometimes can be dangerous"</i>
	<i>"because there children could be joining up with child predators"</i>
	<i>"Because they never know who is on the other side of the screen"</i>
Young people should be trusted	<i>"Because we're capable of keeping ourselves safe."</i>
	<i>"to be fare anything that happens outside of school or online the teachers should have nothing to do with! parents shouldn't be concerned if they trust their child which they should"</i>
	<i>"As long as young people are safe online and they have been told about the potential dangers by either teachers or parents, young people using Social Networking should not be a problem."</i>
Adults should be available for support	<i>"Kids are gonna find whatever the heck they want to find because they're growing up and learning. If you don't want your kid to exposed to the stuff they will most definitley be exposed to at some point then that's okay but your responsibility"</i>
	<i>"Children should have the freedom to choose what they do on the internet, but parents/teachers should play a part in the repercussions."</i>

3.4.7 Further Exploratory Analysis

There was an overall sense that some young people feel interacting online is different to communicating in real-life. This was used as a grouping variable for chi-square analysis to investigate whether there would be a significant difference between the groups on their

response to 'outcomes' of SNS use (frequency of use: upsetting events: knowing everyone on their friends/followers lists). A significant difference was found between the following variables:

I know everyone on my friends list: $\chi^2(2, N= 367) = 11.91, p = .003$

I know everyone on my followers list: $\chi^2(2, N= 366) = 22.01, p \leq .001$

Anything online had upset them or made them feel uncomfortable $\chi^2(1, N= 362) = 5.77, p = .011$

Participants who reported that using SNS felt different to real-life were more likely to report not knowing everyone on their friends and followers lists and were more likely to report that something online had upset them or made them feel uncomfortable.

3.5 Discussion

At the time of writing, this study represents the only research in the field to have involved young people throughout the process.

The findings tie in with those of Shapiro and Margolin's (2014) as the main motivations for young people using SNS appear to be "to stay in touch with friends, make plans, get to know people better, and present oneself to others" (op cit, pg 1). The current study extends this finding to highlight both gender and age differences in how and why young people are using SNS. This study also introduces a new finding – that young people's perception of SNS (whether it is the same or different as interacting in face to face situations) is a significant indicator of online behaviour.

3.5.1 Gender difference and SNS use

The results indicate there is a gender difference in SNS use. There was no significant difference in the number of young people who reported using the most well-known SNS (Facebook) (Lenhart et al., 2015). However, females are more likely to use SNS facilitating sharing photographs and videos, or sites aimed at blogging. Females also reported they were more likely to use SNS to comment on photos, videos or updates of others. Males were more likely to use SNS to play games. This finding could be linked to the development of identity. Pempek, Yermolayeva, and Calvert (2009) found that college students reported self-

presenting and self-disclosing information such as photos, videos and updates helped them express who they were. Photos in particular have been found to be more readily shared by both female college students and female adolescents (Lenhart & Madden, 2007; Lin & Lu, 2011; Pempek et al., 2009). Several literature searches could not find any previous research that has examined gender differences in relation to young people seeing or experiencing something that made them uncomfortable. It could be hypothesised, however, that if females are more likely to self-present and self-disclose information online they could be attracting more feedback – both positive and negative, further linking to theories of identity formation. This could explain the finding that females were significantly more likely to have experienced something online that upset them or made them feel uncomfortable. The qualitative responses indicate 49% of those who reported something online as having upset them were related to friendships. Research into adolescent identity suggests self-presenting and self-disclosing information helps young people validate their thoughts, feelings and behaviours and elicit supportive friendships through reciprocity (Buhrmester & Prager, 1995). Research suggests there may be gender differences in the ways friendships are perceived and enacted by males and females (e.g. Almquist, Östberg, Rostila, Edling, & Rydgren, 2013; Buhrmester, 1998; Cheshire, 2000; Colarossi, 2001). This raises a question about where males develop skills in self-presentation and self-disclosure, which are considered to be important in achieving developmental tasks associated with psychosocial development (Erikson, 1968; Schlenker, 1986; Subrahmanyam & Greenfield, 2008; Valkenburg & Peter, 2011). The hypothesis could be that males are more likely to demonstrate these skills during face-to-face communication. As females reported seeing or experiencing more online which upsets them or makes them feel uncomfortable, it would explain why significantly more females feel parents and teachers should be worried about young people using SNS.

3.5.2 Age difference and SNS use

The results suggest there is difference by year group in terms of SNS use. Little previous research has examined age difference in this regard. A significant difference in which sites young people are using was observed, with the frequency of Facebook, Twitter, Instagram and Snapchat significantly increasing with age. More specifically, the biggest change in frequency of usage for each of these sites appeared to be between Year 8 and Year 9. This could suggest maturation has some impact upon the frequency of SNS use, particularly

between the ages of twelve to fourteen. This would seem to tie in with the findings of Valkenburg and Peter (2007) who found a curved association between age and perception of the depth of communication possible through SNS, peaking at around fifteen years old. Significant differences by year group were observed as to whether young people are using SNS to talk to others, share information (photos, videos or updates) or to play games. A significant difference was observed by year group with Year 10s and 11s more frequently reporting they had experienced something online that had upset them or made them feel uncomfortable, or something online affecting their offline lives. This seems to be a logical finding as older participants are likely to have engaged with SNS for longer, and therefore encountered more positive and negative SNS experiences. A significant difference was observed by year group relating to where young people learned e-safety advice, with more Year 10s and 11s reporting their own experiences. This corresponds with Local Authority research regarding the e-safety training delivered to young people in the area (currently unpublished). The researchers shared that the e-safety program was initially rolled out for Year 7 cohort who are now in Year 10. This could suggest that as Local Authority training was starting to be delivered, young people were more likely to learn about e-safety through their own experiences.

A significant difference was observed by year group relating to whether young people felt teachers and parents should be worried about SNS – more Year 8s and 11s reported parents and teachers should be worried. This could be explained by the Dual Systems Model of adolescent risk taking behaviour (Harden & Tucker-Drob, 2011; Steinberg, 2010; Steinberg et al., 2008), which could suggest there is a particular window of vulnerability for risk-taking behaviour in middle adolescence. This is due to the socioemotional and cognitive control systems reaching maturation at different points (Harden & Tucker-Drob, 2011). This could suggest that in middle adolescence (peaking at age 15 years) young people may experience greater inclinations to seek excitement while their understanding of other factors that would inform their control or inhibition of these inclinations are still developing (Steinberg, 2005; Steinberg et al., 2008). Young adolescents, therefore, may not perceive risks in the same way as older adolescents. Middle adolescence may then represent a time where young people do not see SNS as a risk, and as such would be less likely to see why others view it as such.

3.5.3 Perception of SNS

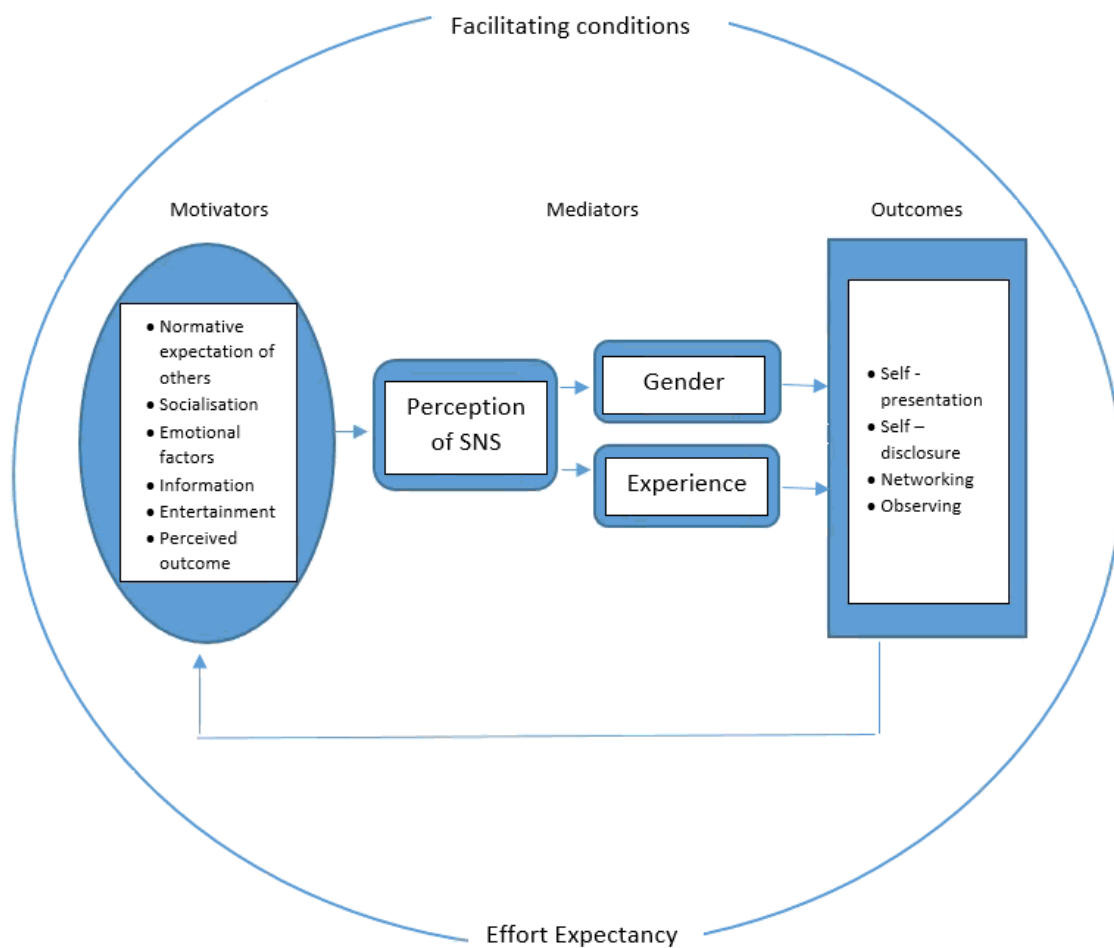
The most interesting and salient finding is the significant difference in whether SNS interaction is seen in the same way as face to face interaction. Those who perceived SNS as different to real-life interaction were significantly more likely to add people previously unknown to them on their friends and followers list. They were also significantly more likely to have seen something online that had upset them or make them feel uncomfortable. This represents a novel finding. Young people who perceive online interaction as different to real-life may be more likely to take risks online (possibly evidenced by the reported knowledge of people on their friends and followers lists), and potentially be more likely to engage in behaviours such as cyberbullying or trolling. In turn, taking more risks online and engaging in different behaviours online may mean young people are more likely to experience things that upset them or make them feel uncomfortable.

3.5.4 Proposed framework to understand young people's SNS use

Drawing these findings together, it would seem that gender, age and perception of the reality of SNS are mediators of how and why young people use SNS. A highly cited model from the information technology literature is the Unified Theory of Acceptance and Use of Technology (UTAUT; Venkatesh, Morris, Davis, & Davis, 2003). This model aims to explain motivations to use an information system and subsequent usage behaviour. UTAUT was subsequently extended for SNS use by Shen and Khalifa (2010). The psychology underpinning the framework suggests their theory makes logical sense. Shen and Khalifa (2010) suggest an individual's use of SNS is motivated by a series of gratifications and social influences and is mediated by the availability, perceived effort and emotional outcome of SNS use. The current study reconceptualises and builds upon this framework to specifically understand young people's use of SNS (see Figure 2). The framework incorporates the mediators highlighted by the current study and embeds them within the existing framework. The framework suggests that what others expect of them (normative expectation of others); socialisation (connecting with friends); emotional factors (seeking an affective response); information (seeking knowledge on a topic/topics), entertainment (seeking enjoyment); and what they expect will happen as a result of SNS use (perceived outcome) are all motivators for SNS use in young people. These motivators are mediated by whether they perceive SNS as the same or different to real-life (perception of SNS), gender and experience of using SNS. The outcomes of SNS use are related to expressing a specific image or identity to others

(self-presentation), revealing information about themselves such as thoughts and feelings (self-disclosure), interacting and connecting with others (networking) and watching or monitoring the interactions or connections of others, although not engaging directly (observing). Overall usage is boundaried by how much effort is required for them to use SNS and how accessible it is in a given environment.

Figure 2. Proposed Framework to Understand Why Young People Use SNS



3.6 Limitations of the study

All steps were taken to ensure the scientific rigour of this study. Limitations such as the timescale and commitments of the schools involved meant that elements of the methodology were adapted. For example, it had been hoped to conduct further focus and validation groups to ensure young people's views were accurately reflected in creating the questionnaire. It would also have helped to extend the pilot group to include further participants. The main limitation of the study is that it was conducted within a relatively small Local Authority in England and the demography of the schools who participated were relatively similar. To be able to generalise the results more confidently, distributing the questionnaire across further contexts would be necessary.

3.7 Conclusions and Implications

This study highlights that young people are using a range of SNS, with the main motivator to interact with existing friends – a finding in line with previous research (Shapiro & Margolin, 2014). The results also build on previous research findings by suggesting young females are more likely to engage in self-disclosing and self-presentation behaviours than males (Lenhart & Madden, 2007; Lin & Lu, 2011; Pempek et al., 2009). The study highlights SNS use appears to reach a peak level during Years 9 and 10. This finding has not been discussed in previous research and suggests age or experience has an impact on SNS use. The most salient finding of this study is that 53% of participants perceived interacting online as somehow different to interacting in a face-to-face environment. Participants who felt interacting online is different to real-life were significantly less likely to know those on their friends and followers lists and significantly more likely to have experienced something online that upset them or made them feel uncomfortable. This represents a novel finding.

Identifying a large group of young people who perceive interacting online as different to real-life could offer a new insight into delivering intervention and e-safety messages. It seems likely that young people who perceive interacting on SNS as different to real-life may take more risks online or engage in behaviours they would not when offline (e.g. trolling or cyberbullying). Furthermore, e-safety messages may be less likely to be effectively heard by those young people who perceive interacting via SNS as different to real-life. It identifies a vulnerable group that has previously been hidden. Those who may be more at risk online may have particular needs that have previously been ignored.

As this group of young people were significantly more likely to have experienced something online that upset them or made them feel uncomfortable, the educational psychologists, with their existing relationships with educational settings, could be well placed to help schools become a protective factor. Few young people stated they reported these incidents or spoke with others about them. This raises the question of how are these young people making sense of what they have experienced. These experiences could potentially have implications for young people's emotional well-being and consequently their learning.

This finding also offers a significant opportunity for educational psychologists working with schools and families, by supporting staff to develop tools to identify young people who may

be at more risk online, and how best to support the young people themselves. It may be helpful for Local Authorities and school staff to tailor their interventions and e-safety messages accordingly.

It remains to be seen precisely in what ways individuals view online and face to face interactions as 'different'. In exploring the possible underpinnings of these aspects in future research, it may be possible to understand some of the more subtle mechanisms relating to young peoples' SNS use. In closing, the most prominent finding from this study can be summarised neatly by one focus group participant: *"yeah... but it's not real-life is it?"*.

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Appendix I – Critical Appraisal of Papers

Key:

Good
Medium
Poor
N/A

Paper: Cyr (2014)

Area of Focus	Sub-questions	Decision	Justification for Decision
Appropriateness of study design to research objective?	Authors clearly set out research question	Poor	Research question not set out. Purpose of study described.
	Authors clearly define hypotheses	Good	Hypotheses are clearly defined within the text
	Authors choice of data analysis is appropriate for hypotheses	Good	Correlational analysis for observing patterns or relationships fits hypotheses.
Risk of bias	Sample size is appropriate for chosen methodology	Medium	A medium sample size of 268.
	Unbiased recruitment strategy	Medium	Participants were recruited from “three public high schools” unclear if this is an opportunistic sample or whether a clear recruitment strategy has been adopted.
	Equal gender split between males and females	Poor	69% of respondents were female.
	Equal age distribution	Medium	Only 6% of the sample are 17-18 year olds, the remaining 94% of the sample is relatively equally distributed amongst 14-17 year olds.
	Clear consent procedure	Medium	University Ethics Committee approved parental consent from was distributed. Signed consent forms were required for respondents to participate. No mention of participant consent/assent.

	Clear withdrawal procedure		No mention of withdrawal procedure if participants wished to opt out.
	Limitations are thoroughly explored and acknowledged		Limitations of the study clearly identified and discussed.
Choice of measures	Measures are appropriate for sample		Not clear if measures used are designed for use with young people
	The number of measures are appropriate for the sample		8 measures were presented to the sample, ranging from 10 to 13 items in length
	The length of time needed to complete the measures is appropriate for the sample		Unclear how long the questionnaires would have taken to complete, although a limitation acknowledged by the author is the “effect of long questionnaires”.
	Authors report validity of measures use		Cronbach’s alpha was conducted by the author on each of the measures which reported internal consistency between acceptable and excellent. References were provided were all scales, bar the “Technology Usage Scale” which was created by the author.
	The measures are distributed in a safe place		Measures completed in “a group classroom setting” – unclear if this was appropriate given the nature of some of the questions.
Quality of reporting	Authors use a wide range of literature		Literature cited from 1956-2011.
	Authors provide a balanced view/critique of literature		Heavy reliance on one particular source in one section, with little critique.
	Authors cite recent research where appropriate		Research from 2011 cited
	Authors consistently justify claims made		Some significant claims were not justified or evidenced by the author.
	Authors clarify all constructs discussed		Clarify some constructs such as “identity”, but don’t clarify what is meant by “identity formation”.
	Authors clearly detail their procedure		Procedure is relatively short, and does not mention whether participants were told they would be asked about their use of technology etc., alongside their “beliefs

			and feelings about their sense of self” which could be misleading to participants.
	Authors are consistent in their use of terminology		Terms such as “better adjusted” and “well-being” seem to be used interchangeably with “identity”
Generalisability	The sample size is appropriate to generalise the results		A sample size of 268 could be considered small when considering reliably generalising results (Charter, 1999)
	The sample is not skewed by gender bias		Sample significantly skewed by the gender ratio in favour of females (69%)
	The sample is not skewed by age bias		Fewer respondents were within the older age bracket, but the age of the remaining respondents was relatively evenly distributed.
	The demographic spread of the sample is even		Unclear demographic spread of respondents with “26% minority enrollment in one school compared to approximately 15-16% minority in the remaining two”
Overall contribution to answering the question posed by the systematic review			One hypothesis, area of investigation and conclusion directly relates to the impact of SNS use on adolescent identity development.

Paper: Valkenburg and Peter (2008)

Area of Focus	Sub-questions	Decision	Justification for Decision
Appropriateness of study design to research objective?	Authors clearly set out research question		Research question clearly detailed.
	Authors clearly define hypotheses		Hypotheses clearly identified and justified.
	Authors choice of data analysis is appropriate for hypotheses		Correlational analysis and Structural Equation Modelling appropriate for investigating relationships and therefore fit the hypotheses.
Risk of bias	Sample size is appropriate for chosen methodology		A large sample size of 1,158

	Unbiased recruitment strategy		Sampling was done through a separate research company who randomly recruited participants from across the Netherlands. However respondents were recruited from an existing online panel, which may mean respondents were more interested in online communication and/or research.
	Equal gender split between males and females		49.9% female and 50.1% male
	Equal age distribution		No mention of distribution of ages.
	Clear consent procedure		Parents' and adolescents' informed consents were obtained.
	Clear withdrawal procedure		Participants were notified that they could stop participation at any time.
	Limitations are thoroughly explored and acknowledged		Some limitations mentioned and discussed.
Choice of measures	Measures are appropriate for sample		Some measures were created by the authors, others created by previous researchers but it was unclear if they were designed specifically for their target population.
	The number of measures are appropriate for the sample		6 measures ranging from 5 to 19 items in length
	The length of time needed to complete the measures is appropriate for the sample		It took respondents between 10-15 mins to complete all measures.
	Authors report validity of measures use		High Cronbach's alpha scores were reported for 5 scales, with factor analysis scores reported for the remaining 1.
	The measures are distributed in a safe place		The questionnaire was completed by respondents online. Participants were encouraged to complete the survey "in their own time" giving them the flexibility of completing the questionnaire when they felt safe. The confidentiality and privacy of the respondents was assured by the authors.
Quality of reporting	Authors use a wide range of literature		Literature cited from 1988-2007

	Authors provide a balanced view/critique of literature		Acknowledge and explore competing viewpoints.
	Authors cite recent research where appropriate		Research referenced from 2005/6
	Authors consistently justify claims made		Some claims made without evidence or justification.
	Authors clarify all concepts discussed		Clearly defined all concepts discussed.
	Authors clearly detail their procedure		Clear and detailed procedure.
	Authors are consistent in their use of terminology		Consistent use of terminology.
Generalisability	The sample size is appropriate to generalise the results		A sample size of over 400 can be considered reliable for generalising results (Charter, 1999)
	The sample is not skewed by gender bias		Even gender split among the sample
	The sample is not skewed by age bias		Not discussed by authors
	The demographic spread of the sample is even		No mention of ethnicity within the sample. However, authors state that "Analyses showed that the gender, age, and education level of our respondents did not deviate from official statistics in the Netherlands".
Overall contribution to answering the question posed by the systematic review			Aspects of identity are explored but the focus is on the impact of identity experimentation online on other aspects of "self".

Paper: Leung (2011)

Area of Focus	Sub-questions	Decision	Justification for Decision
Appropriateness of study design to research objective?	Authors clearly set out research question		Clearly set out research question.
	Authors clearly define hypotheses		Hypotheses clearly identified.

	Authors choice of data analysis is appropriate for hypotheses		Regression analysis to explore relationships and mediators fit with hypotheses.
Risk of bias	Sample size is appropriate for chosen methodology		A large sample size of 718
	Unbiased recruitment strategy		A probability sample randomly generated by the Census and Statistics Department in Hong Kong.
	Equal gender split between males and females		Relatively even split with 44.4% males and 55.6% females.
	Equal age distribution		14.9% in the age group of 9–11, 73% in the 12–17 year old group, and 12.1% in the 18–19 year old group.
	Clear consent procedure		No mention of consent procedure.
	Clear withdrawal procedure		No mention of withdrawal procedure.
	Limitations are thoroughly explored and acknowledged		Limitations identified and discussed.
Choice of measures	Measures are appropriate for sample		Unclear on whether the measures were designed for use with young people.
	The number of measures are appropriate for the sample		5 measures included but number of items within them not specified.
	The length of time needed to complete the measures is appropriate for the sample		No mention of how long measures would take to complete.
	Authors report validity of measures use		Cronbach's alpha reported for each measure ranging between good and high internal validity.
	The measures are distributed in a safe place		Location of data collection not specified. "Parents of children under the age of 12 were requested to be present to attend the interview when the interviewees experienced difficulty answering the questions" which could affect young people's willingness to answer some questions.
Quality of reporting	Authors use a wide range of literature		Majority of literature referenced is pre-2008, a few pieces of later research are mentioned.

	Authors provide a balanced view/critique of literature		Little critique of literature discussed.
	Authors cite recent research where appropriate		References recent literature later in the paper although relatively sparsely.
	Authors consistently justify claims made		Some claims go unjustified but the majority are supported by evidence.
	Authors clarify all concepts discussed		Concepts clearly defined and discussed.
	Authors clearly detail their procedure		Some details are made clear but some key elements are missing such as where interviews took place; who was present etc.
	Authors are consistent in their use of terminology		Terminology used is consistent.
Generalisability	The sample size is appropriate to generalise the results		A sample size of over 700 is considered reliable for generalising results (Charter, 1999).
	The sample is not skewed by gender bias		Relatively equal gender split with the sample consisting of 44.4% males and 55.6% females.
	The sample is not skewed by age bias		Uneven distribution of ages, with 14.9% in the age group of 9–11, 73% in the 12–17 year old group, and 12.1% in the 18–19 year old group – however the authors claim that this distribution pattern “closely resembles” the 2008 population census.
	The demographic spread of the sample is even		Ethnicity not considered, but family income discussed.
Overall contribution to answering the question posed by the systematic review			Identity is examined as a mediator to loneliness. This adds to the question more indirectly.

Paper: Quinn and Oldmeadow (2013)

Area of Focus	Sub-questions	Decision	Justification for Decision
Appropriateness of study design to research objective?	Authors clearly set out research question		Research question alluded to rather than clearly stated.

	Authors clearly define hypotheses		Hypotheses not clearly stated.
	Authors choice of data analysis is appropriate for hypotheses		Analysis appropriate for exploring relationships.
Risk of bias	Sample size is appropriate for chosen methodology		Relatively large sample size.
	Unbiased recruitment strategy		No recruitment strategy mentioned.
	Equal gender split between males and females		Equal gender split with 48.98% males.
	Equal age distribution		Even age distribution with M = 11.83, SD = 1.23 in a sample aged 9-13 years.
	Clear consent procedure		Adult consent obtained, not clear if young people also provided their assent.
	Clear withdrawal procedure		No withdrawal procedure described.
	Limitations are thoroughly explored and acknowledged		Limitations identified and discussed.
Choice of measures	Measures are appropriate for sample		Not clear if measures were designed for young people.
	The number of measures are appropriate for the sample		A total of three measures used.
	The length of time needed to complete the measures is appropriate for the sample		Time required to complete measures not mentioned by the authors.
	Authors report validity of measures use		Good to high Cronbach's alphas reported for two of the measures. SNS intensity validity not measures, it also unclear how young people were asked to "indicate" their level of use.
	The measures are distributed in a safe place		Measures were distributed in classrooms "supervised by either their teachers or the researcher".
Quality of reporting	Authors use a wide range of literature		Authors used a wide range of literature citing studies from 1985-2012
	Authors provide a balanced view/critique of literature		Authors do not explore some of the debates that are present in the literature.

	Authors cite recent research where appropriate		Studies cited from 2012
	Authors consistently justify claims made		Authors consistently justified claims with evidence.
	Authors clarify all concepts discussed		Concepts mentioned but not clarified or defined.
	Authors clearly detail their procedure		The procedure is very short, which leads to questions about large parts of the process that they adopted.
	Authors are consistent in their use of terminology		Authors are consistent in their use of terminology throughout.
Generalisability	The sample size is appropriate to generalise the results		A sample size of over 400 is considered large enough to generalise results (Charter, 1999).
	The sample is not skewed by gender bias		Equal gender split with 48.98% males.
	The sample is not skewed by age bias		Even age distribution with M = 11.83, SD = 1.23 in a sample aged 9-13 years.
	The demographic spread of the sample is even		No information about demographic make up of the sample.
Overall contribution to answering the question posed by the systematic review			Directly relates to the impact of SNS use on adolescent's sense of belonging – an important part of identity as defined previously.

Paper: Reich et al. (2012)

Area of Focus	Sub-questions	Decision	Justification for Decision
Appropriateness of study design to research objective?	Authors clearly set out research question		No clear research question identified by authors.
	Authors clearly define hypotheses		Hypotheses suggested but not made explicit by the authors.
	Authors choice of data analysis is appropriate for hypotheses		Analysis mainly reliant on frequency which is appropriate for observing patterns of data.

Risk of bias	Sample size is appropriate for chosen methodology		Relatively small sample size of 251, although only 126 completed the online survey element
	Unbiased recruitment strategy		Participants were recruited from three high schools in Southern California but it is unclear how participants were selected.
	Equal gender split between males and females		59% of the sample were female.
	Equal age distribution		Majority of respondent (62%) are within the 16-17 years old age group.
	Clear consent procedure		Parental consent and young person assent gained by authors.
	Clear withdrawal procedure		No withdrawal procedure mentioned.
	Limitations are thoroughly explored and acknowledged		Limitations clearly identified and explored.
Choice of measures	Measures are appropriate for sample		Questionnaires used were those that had been used in a previous study, and had been particularly designed for young people.
	The number of measures are appropriate for the sample		Two measures used with participants.
	The length of time needed to complete the measures is appropriate for the sample		The in person survey took 20–30 min to complete, and the online survey took between 15–20 min.
	Authors report validity of measures use		No validity details provided.
	The measures are distributed in a safe place		No clear information about where the measures were distributed, other than the online survey could be completed at home.
Quality of reporting	Authors use a wide range of literature		Authors use a wide range of literature – citations range from 1988 to 2011
	Authors provide a balanced view/critique of literature		Acknowledge and discuss differing perceptions within the field.

	Authors cite recent research where appropriate		Research cited from 2011.
	Authors consistently justify claims made		Claims justified with evidence throughout.
	Authors clarify all concepts discussed		Different concepts mentioned but not discussed or defined.
	Authors clearly detail their procedure		Clear and detailed procedure.
	Authors are consistent in their use of terminology		Authors are consistent in their use of terminology throughout.
Generalisability	The sample size is appropriate to generalise the results		Sample would be considered small to generalised results (Charter, 1999).
	The sample is not skewed by gender bias		59% of sample are female.
	The sample is not skewed by age bias		Majority of participant fall into the 16-17 year old bracket.
	The demographic spread of the sample is even		70% of participants came from a Latino background and there is no clear justification as to why this should be. No clear investigation is to socioeconomic background.
Overall contribution to answering the question posed by the systematic review			The study examines the relationship between SNS use and friendships, which is related to identity and sense of belonging.

Paper: Valkenburg and Peter (2007)

Area of Focus	Sub-questions	Decision	Justification for Decision
Appropriateness of study design to research objective?	Authors clearly set out research question		Authors clearly state the research question
	Authors clearly define hypotheses		Authors clearly state the hypotheses within the text.
	Authors choice of data analysis is appropriate for hypotheses		Correlational analysis and Structural Equation Modelling appropriate for investigating relationships and therefore fit the hypotheses.

Risk of bias	Sample size is appropriate for chosen methodology		Sample size of 794
	Unbiased recruitment strategy		The sample were recruited “from six elementary and secondary schools in the Netherlands” but unclear how participants were selected.
	Equal gender split between males and females		Relatively even gender split (51% males and 49% females)
	Equal age distribution		Sample consisted of 10-16 year olds (M 13.31; SD 1.50)
	Clear consent procedure		Authors obtained parental consent, but no detail about young person assent
	Clear withdrawal procedure		No detail of withdrawal procedure
	Limitations are thoroughly explored and acknowledged		Limitations identified and explored
Choice of measures	Measures are appropriate for sample		Not clear if measures are designed for young people
	The number of measures are appropriate for the sample		Young people were asked to complete some items taken from a total of 5 measures
	The length of time needed to complete the measures is appropriate for the sample		The administration time was 15 mins
	Authors report validity of measures use		Cronbach’s alpha were reported for four measure – one being acceptable with 3 being high. The remaining measure was subject consisted of 2 items, and was used as a grouping variable in later analysis.
	The measures are distributed in a safe place		Questionnaires were administered in the young people’s classrooms and the authors “made sure that the adolescents had sufficient privacy to fill in the questionnaire”, although it is not clear how this was achieved.
Quality of reporting	Authors use a wide range of literature		Literature cited from 1973-2005
	Authors provide a balanced view/critique of literature		Acknowledge and discuss both sides of the debate presented in the literature

	Authors cite recent research where appropriate		Research cited from 2005
	Authors consistently justify claims made		Authors consistently justify claims with evidence.
	Authors clarify all concepts discussed		Authors don't use "identity" as a construct but clearly describe aspects of it.
	Authors clearly detail their procedure		The procedure is clear.
	Authors are consistent in their use of terminology		Authors are consistent in their use of terminology throughout.
Generalisability	The sample size is appropriate to generalise the results		A sample size of over 700 could be considered large (Charter, 1999) and therefore results could be generalised accordingly.
	The sample is not skewed by gender bias		The gender split if the sample is relatively even (51% males and 49% females)
	The sample is not skewed by age bias		Sample consisted of 10-16 year olds (M 13.31; SD 1.50)
	The demographic spread of the sample is even		Authors state that "because some Dutch teachers object to privacy-sensitive survey questions about family income/socioeconomic status and education, we did not present children with questions about these variables", however the schools approached for the study represented all education levels available in the Netherlands.
Overall contribution to answering the question posed by the systematic review			The study examined adolescents' feelings of closeness to friends and SNS, which is associated to sense of belonging.

Paper: Davis (2013)

Area of Focus	Sub-questions	Decision	Justification for Decision
Appropriateness of study design to research objective?	Authors clearly set out research question		The author clearly set out several research questions
	Authors clearly define hypotheses		Hypotheses both stated and diagrammatised

	Authors choice of data analysis is appropriate for hypotheses		Analysis based on the model built around hypotheses
Risk of bias	Sample size is appropriate for chosen methodology		Sample consisted of 2079 young people
	Unbiased recruitment strategy		All secondary schools in the area were approached by the researcher
	Equal gender split between males and females		57% of the sample were female
	Equal age distribution		The sample consisted of young people between the ages of 11 and 19 years (M = 15.4 years).
	Clear consent procedure		The author adopted an “opt out” approach to the parental consent gained, no detail regarding gaining the young people’s assent.
	Clear withdrawal procedure		No detail provided about withdrawal procedures
	Limitations are thoroughly explored and acknowledged		Limitations were clearly identified and explored.
Choice of measures	Measures are appropriate for sample		Not clear if the measures were designed for young people
	The number of measures are appropriate for the sample		5 measures were used by the author, with one demographic information measure.
	The length of time needed to complete the measures is appropriate for the sample		No mention of the amount of time the measures took to complete.
	Authors report validity of measures use		Very high Cronbach’s alpha were reported for measures apart from the demographic measure.
	The measures are distributed in a safe place		The survey was completed by participants on computers at their school.
Quality of reporting	Authors use a wide range of literature		Literature cited from 1966-2011
	Authors provide a balanced view/critique of literature		Author discusses both positive and negative opinion presented in the literature.
	Authors cite recent research where appropriate		Research cited from 2011

	Authors consistently justify claims made		
	Authors clarify all concepts discussed		Clearly clarifies the concept of “identity”, less clear about “identity formation” but a clear attempt made
	Authors clearly detail their procedure		Clear and detailed procedure presented.
	Authors are consistent in their use of terminology		Use of terminology consistent throughout.
Generalisability	The sample size is appropriate to generalise the results		A sample of over 2000 would be considered very large and therefore appropriate to generalise results from (Charter, 1999).
	The sample is not skewed by gender bias		57% of the sample were female.
	The sample is not skewed by age bias		The sample consisted of young people between the ages of 11 and 19 years (M = 15.4 years).
	The demographic spread of the sample is even		Consistent distribution in terms of ethnicity, socioeconomic features were taken into consideration in order to reference generalizability of results in Bermuda to USA.
Overall contribution to answering the question posed by the systematic review			Study is directly examining the impact of SNS use on adolescent identity development.

Parent Information Sheet

Exploring how and why young people use social networking sites

Your child has been invited to take part in a survey. Before you decide if they can take part it is important for you to understand why the research is being done and what it involves. Please take time to read the following information carefully and discuss it with others if you wish.

What is the project about?

This study aims to understand how and why young people use social networking sites. Understanding how and why young people use these sites can help us be clearer about when young people's use of these sites is for positive reasons, and when it might be harmful. This could mean that parents and professionals may know more about when and how to intervene, and when to support young people using social networking sites.

Why has my child been invited to take part?

Your child has been chosen because they are in Year 8 or above, and are local to the area. Every young person in secondary education in the local area has been asked to take part.

Does my child have to take part?

Taking part in this study is entirely voluntary; it is up to you and your child to choose whether to take part. If you **are happy** for your child to take part, you do not need to do anything further. If you decide that you would **not** like your child to take part, please contact their school and your child's name will be removed from the list. You can change your mind at any time without giving a reason. If you have any questions or concerns please e-mail me (l.gray2@ncl.ac.uk).

What will my child be asked to do?

Your child will be asked to complete an online questionnaire. The questionnaire has been designed by other young people in the area. The questionnaire asks questions about how and why young people use social networking sites

Will my child taking part in this study be kept confidential?

Yes. Data collected will only be looked at by myself. I will follow ethical and legal practice and all information will be handled in confidence. No personal details about your child, or about who they are will be collected.

Who has reviewed the study?

The study has been reviewed and approved by Newcastle University Ethics Committee.

Thank you for reading this information sheet.

Exploring how and why young people use social networking sites

Your child has been invited to take part in this study. Before you decide if they can take part it is important for you to understand why the research is being done and what it involves. Please take time to read the following information carefully and discuss it with others if you wish. Please contact me if there is anything that is not clear or if you would like some more information.

What is the project about?

This study aims to understand how and why young people use social networking sites. Understanding how and why young people use these sites can help us be clearer about when young people's use of these sites is for positive reasons, and when it might be harmful. This could mean that parents and professionals may know more about when and how to intervene, and when to support young people using social networking sites.

Why has my child been invited to take part?

Your child has been chosen because they are aged between 13 and 18 years, and are local to the area. A teacher from school has identified your child and a group of their friends as people who might like to help with my research. I will also be inviting groups of friends from different schools.

Does my child have to take part?

Taking part in this study is entirely voluntary; it is up to you and your child to choose whether to take part. If you do decide for your child to take part, you can change your mind at any time without giving a reason.

What will my child be asked to do?

I will ask your child to help me design a questionnaire that will be sent out to young people across the local area later in the year. Whilst your child and their friends are working with me, I will record our conversation to help me remember what is said. The recording will be securely stored and destroyed when the research is finished and will not be accessed by anyone else.

It will take approximately 1 hour for us to finish this activity.

Will my child taking part in this study be kept confidential?

Data collected will only be looked at by myself. I will follow ethical and legal practice and all information will be handled in confidence. The recorded information will be transcribed and anonymised before being stored on a computer. The information gathered during the research will be presented as part of my thesis and may be used in conferences, or to write journal articles. I will not use your or your child's name on anything published or presented about the study.

Who has reviewed the study?

The study has been reviewed and approved by Newcastle University Ethics Committee

Can I talk to someone before agreeing to take part?

If you would like to further information about this project you can contact me on, l.gray2@ncl.ac.uk. You are welcome to ask us any questions or discuss any worries you may have.

Thank you for reading this information sheet

What do you use social networking sites for?

What is this about?

I am a trainee psychologist from Newcastle University and I would like to invite you to take part in a research project. I am interested in finding out how and why you use social networking sites.

To help you decide whether or not you would like to take part in the project, please could you read this sheet. This will tell you about the research. It is very important that you understand what the project is about before you agree to take part. Please talk to your family about it, if you want to.

Why have I been chosen?

You have been chosen to take part because you are a young person aged between 13 and 18, who lives in the local area. Your teacher has chosen groups of friends within your school who might like to help me make a questionnaire for other young people. I will also be inviting young people from other schools to take part.

Do I have to take part?

No. You can decide whether or not you would like to take part. If you agree to take part, and later change your mind, you can stop at any time. You don't have to give a reason.

If I take part, what will I be asked to do?

If you choose to take part you will be asked to help me design a questionnaire, with some of your friends. As a group we will talk about some of the things that are important to you when you use social networking sites.

While we are talking and making the questionnaire, the conversation will be recorded. This will help me remember what we discussed. The recording of our conversation will be safely stored, where no one else will be able access it. Nothing on the recording will mean anyone will be able to tell who you are. I am the only one who will hear the recording. The recording will be destroyed at the end of the project. It will take about 1 hour for us to finish our conversation.

Who will know that I am taking part?

The only people who will know that you are taking part your parent, the teacher who chose you and your friends, and me. What you tell me will be kept private. However if you tell me something that makes me worry about you, then I may have to tell your parent or your teacher.

Can I talk to someone before agreeing to take part?

Yes, if you or your parents have any questions you can contact me by e-mail. My contact details are: Laura Gray- l.gray2@ncl.ac.uk

If you think that you might like to take part in this project, then you and your parents should fill in the form and send it back to us. I will then get in touch to arrange a time to meet with you and your friends in school.

Thank you for reading this letter!

Exploring how and why young people use social networking sites

Please tick each box.

I confirm that I have read and understood the information sheet (version 1.1) for the above study. I have had the opportunity to consider the information and ask questions and have had these answered satisfactorily.

☐

I understand that my child's participation is voluntary, and that I am free to withdraw them at any time, without giving any reason.

☐

I have been asked to give consent for my daughter/son to participate in this research study which will involve him/her helping to design a questionnaire.

☐

I understand that she/he will also be asked to give permission and that her/his wishes will be respected.

☐

I consent voluntarily for my child to participate in this study and understand that I have the right to withdraw her/him from the study at any time, without giving a reason.

☐

Name of Young Person _____

Name of Parent/Carer _____

Date _____ Signature _____

Name of Researcher _____

Date _____ Signature _____

What do you use social networking sites for?

Please read the following sheet very carefully.

Please tick each box if you agree with each statement.

1. I have read and understand the information sheet Version 1.1 for this study. I have been able to think about the information, and ask any questions. I understand the answers to any questions that I had. ☐

2. I understand that taking part in the project is my choice, and that I am free to change my mind at any time without giving any reason. ☐

3. I agree to take part in the study ☐

Name of Participant _____

Date _____ Signature _____

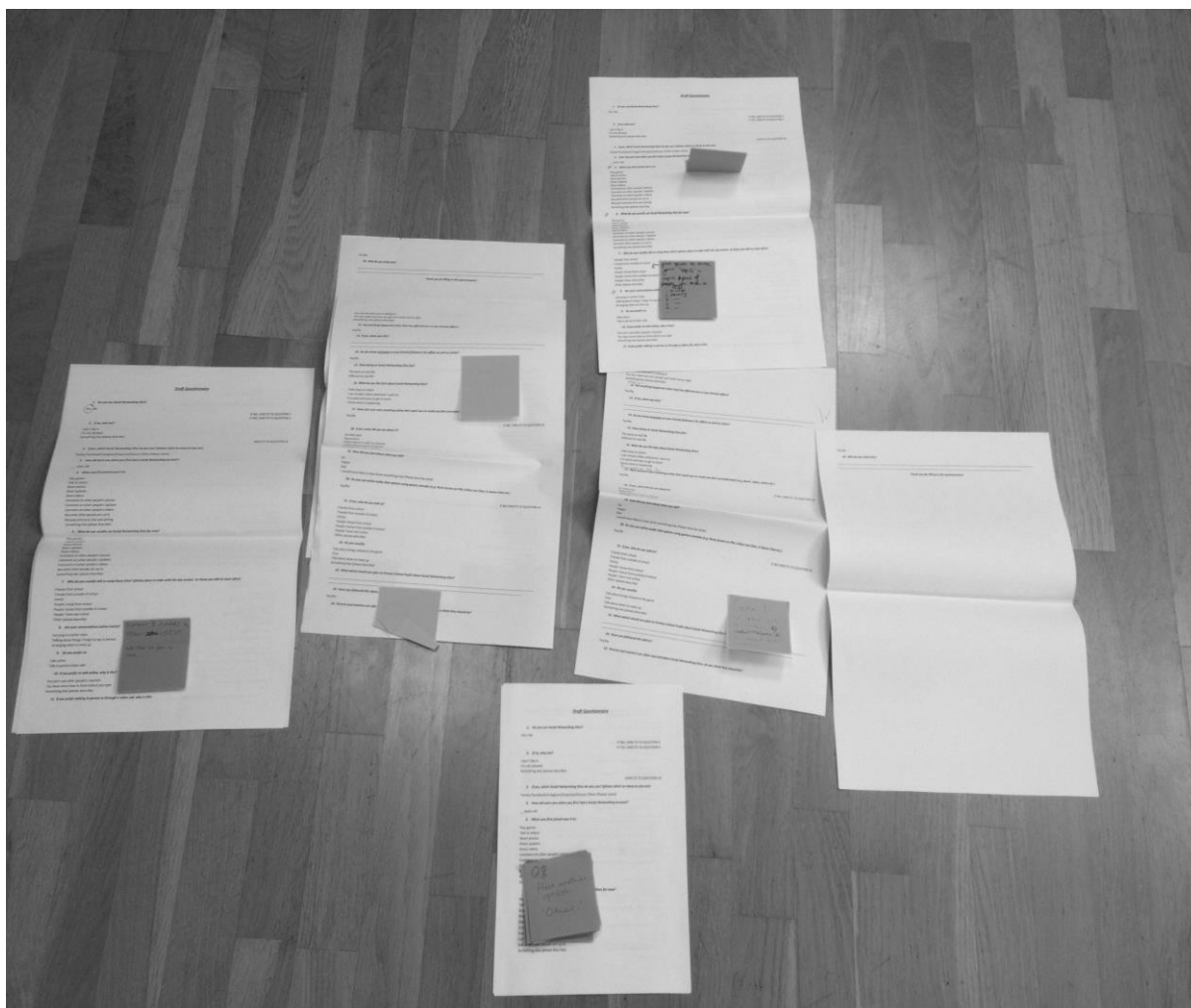
Name of Researcher _____

Date _____ Signature _____

Appendix III – Guiding Questions for Focus Groups

1. What Social Networking Sites do you use?
2. What do you like about them?
3. If you were to make your own what features would it have?
4. What do you think of these headlines?

Appendix IV – Feedback from Validation Groups



Appendix V – Questionnaire